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COMMON SENSE
AND THE
RUDIMENTS OF PHILOSOPHY

COMMON SENSE
AND THE
RUDIMENTS OF PHILOSOPHY

BY
CHARLES E. HOOPER

Second (Revised) Edition

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PREFACE TO THE SECOND EDITION

THE original edition of this short treatise appeared under the title *Common Sense : An Analysis and Interpretation*. The more expansive title now substituted for the above might have been fairly adopted from the first ; but certain matter added to the present edition, tending in the direction of systematic philosophy, makes it now especially appropriate.

In this second edition, the detailed "Reference Synopsis" has been omitted as unnecessary ; while the somewhat lengthy Chapter IX has been broken up into Sections with descriptive headings, similar to those previously adopted in Chapter X. The Appendix referring to my earlier book on *The Anatomy of Knowledge*¹ also disappears.

Sundry revisions of phrases and sentences have been made throughout the book ; but the alterations in Chapters I to VIII are comparatively unimportant.

¹ Issued 1906 ; now out of print, and partly superseded by the present work. It emphasizes many of the elementary distinctions which here re-appear, and also contains a somewhat elaborate classification of the sciences and cognate arts, which I should like, at a future date, to revise and re-issue.

They include, in Chapter II, revised definitions of *character* and *mind*; in Chapter VII, a short addition on the claims of monogamy; and in Chapter VIII, some further observations on the ideal of liberty.

The earlier parts of Chapters IX and X have undergone little alteration, but considerable deletions and more considerable additions have been made in the later sections of both these chapters. This was necessary in the light of much subsequent (and I hope deeper) reflection on the subjects discussed.

The new matter is comprised in Sections 6, 7, 8, and 9 of Chapter IX, and Sections 7, 8, 9, and 10 of Chapter X.

CHAPTER I

COMMON SENSE AS COMMONLY POSSESSED

THERE is a valid sense in which we may be said to know many things without having any clear recollection of the process by which the knowledge has been arrived at, or any formulated reasons for accepting it either as true or as efficacious. The "man in the street," or any person who is not much given to speculation and introspection, always possesses a more or less extensive fund of this common-sense knowledge. He has a serviceable acquaintance with his own body, regarded as the seat of all his feelings and the instrument of all his conscious actions, although he may be very ignorant of its inner anatomy and vital processes. He *knows how* to use his limbs and his eyes (where knowledge is a conscious capability, dependent mainly upon instinct developed by practice), and he also knows reflectively how he is accustomed to use them, and how he has used them on particular occasions. Again, he knows, with various degrees of intimacy, many of his fellow human beings, and is familiar with them and with numerous sub-human things, such as horses, dogs, trees, houses, articles of furniture and of clothing, not merely as being objects of this or that kind, but as being individual, and in some respects unique, instances of their several kinds. He is familiar, in a similar way, with certain definite "places," marked by peculiar groupings of buildings, squares, streets, and bridges, in towns; of fields, woods, roads, and scattered

houses, in the country ; of hills, valleys, rivers, cliffs, and coast-lines.

Wherever the man moves on the face of mother earth, his horizon moves with him. Remote objects are brought nearer, and new objects appear beyond. Near objects are passed, and (as he glances back) become diminished and eventually disappear ; but he does not doubt that most of them remain in their places, and that any "place" can be revisited. There is no need for geography to tell him that the surface of the land, or of land terminating in shores which are linked by stretches of water, is continuous. Judged by the standards which his own experience affords, it extends without break in all directions, and its local features, like itself, are permanent. A similar permanence, though it may in fact be of less duration, belongs to most of the objects encountered in everyday life. When the man awakes from sound sleep, he finds himself in familiar surroundings. The furniture of his bedchamber stands where it did. His watch has continued to exist and also to tick and mark the passage of the hours. The bed in which he found temporary oblivion was not spirited away at the moment when it faded out of his consciousness. He need not contemplate the pages of history in order to be assured that time has gone on as it always goes, translating, through the ever-moving portal of the present, what was the future into what is the past. The break in his own consciousness caused no break in this time-process ; yet the resumption of consciousness makes all the difference to him—the difference between life and a condition which, so far as thought and feeling were concerned, was a temporary death. (This, of course, is assuming the sleep to have been dreamless.)

In almost any place where our typical unspeculative person happens to be, when awake, there is a multitude

of surrounding objects of which individually he takes little or no notice, but is more or less clearly aware from his present sensations, and which, if his attention were called to any of them in particular, he would have no difficulty in classifying under concrete-general names. In fact, most actual sensations, when recognized as being of this or that familiar kind, are simultaneously recognized as proceeding from some object of a familiar type; while it continually happens that we recognize some object by means of a sensation, without troubling about the sensation itself. We do not doubt that we see certain *things* by means of the visual images which our eyes convey to the centres of consciousness in the brain; but the tangible solidity and other real qualities which differentiate these things from animated pictures are in fact inferred, not seen. Thus the merest glance at the exterior of a house assures us that it is a house, with rooms, passages, staircase, certain furniture, and accustomed occupants, although we see nothing of these. The merest glance at a person passed in the street assures us that he or she is a being of flesh and blood, clothed in certain familiar materials; not a bodiless ghost; not a dream phantasm; not an artificial image such as is thrown on a cinematograph screen. Similarly we may be very certain that a dish containing onions is being cooked, although the smell is all we have to base a judgment upon; or we may be very certain that a dog is barking, although we do not see the dog. That our confident judgments as to the nature of surrounding things, when based on transient sensations, sometimes deceive us, must of course be admitted. We are especially liable to think that we have actually seen things which we have simply inferred from familiar visual appearances with which they are usually associated. It is the knowledge of this liability, and of the particular directions taken by it, which the

clever conjurer turns to account. Nevertheless, that the great majority of common-sense inferences based on passing sensations are correct may be judged from the numerous cases in which we have subsequent evidence that a given inference was correct, and the comparative rarity of the cases in which we are proved to have been deceived. We eat of the dish containing onions which we previously smelt. We see the dog of whose existence we knew at first from its bark alone. We enter and become more or less at home in some of those houses which we took to be houses from the exterior view of them. We converse and form friendly or other relations with some of the persons whom we judged to be persons at first sight.

The recognition of surrounding objects as being of given kinds involves the recognition of many qualities and relations of, or facts pertaining to, objects of each class. Our typical ordinary person knows a great variety of such facts, and he also knows, though he may not be able to express in words, the idiosyncrasies, or peculiarities of physiognomy and of other characters, by which he distinguishes persons and things individually familiar to himself from strangers and comparatively strange objects. Moreover, he knows, though here again he may find a difficulty in putting his knowledge into language, many practical rules or ways of acting in relation to things and persons, both to things and persons considered according to kind or status, and to those with whose individual natures he is personally acquainted—rules to which he must conform in order to achieve his purposes or to avoid unwelcome consequences.

Though not given to introspection, as such, he knows by experience, and in many cases vividly remembers, his own feelings of pleasure and pain, of effort and quiescence, of love and anger, of desire and fear ; while

various incidents of his past life are recalled from time to time. Not less certainly does he know that he wills, or chooses, this or that, and takes action with the desired end in view, and that he sometimes pauses and reflects in order to make a wise or a right choice and finally either does or does not act as he at first felt inclined to do. In acting as he chooses he feels himself to be a free agent. In having the ability to reflect before acting he feels himself to be a rational and responsible agent. It of course does not follow that he can choose to act without a determining motive, or that he can choose to defer action and reflect without a determining disposition, or that any motive or disposition exists independently of its being conditioned by the brain and nervous system. He is, however, often conscious of a conflict of motives; and the predominance of one motive over another, when alternative possibilities are presented to the mind, *is*, in the natural sense, a personal selection of the end preferred; for both motives really appeared in his consciousness, though, when one prevailed, his will was identified with it alone. Alternative possibilities may, of course, involve the alternatives, above alluded to, of immediate action and reflection which delays or inhibits action. They may also involve the alternatives of action—in the larger sense which includes purposive attention, observation, and reflection—and mere inaction of the indolent or inattentive sort.

Although the feelings, thoughts, and decisions of the individual are peculiarly his own, most of them have reference to objects which are not parts of himself or to other persons. When he observes others acting or hears them speaking under given circumstances as he himself might act or speak, he has no hesitation in attributing to them feelings, thoughts, and decisions such as he himself has experienced. He *knows* something at least of their

inward, invisible life ; although he cannot actually share it, any more than they can share his. It is from this common-sense recognition of the inwardness of other lives that human sympathy, with its obligations and prohibitions, its sentiments of praise for goodness and blame for malice, and with the whole circle of ethical ideas, arises ; though we shall see that the more strictly ethical valuations and regulations do not come within the province of common sense, as here understood.

In attempting, as I have done, to describe broadly and without any exactitude of definition what common sense is, I have referred to it as belonging to "the man in the street," and have repeatedly assigned the masculine pronoun to the typical possessor of it. This was done for brevity's sake, and it is perhaps needless to say that the sort of common sense described is equally possessed by the two sexes. It is not, however, equally possessed by all persons ; for there are various degrees of personal deficiency in common sense, just as there are various degrees of personal deficiency in the knowledge acquired by study and the power of logical reasoning thereon. In addition to these differences due to individual capacity, there are other differences due to social circumstances or conditions ; developments of common sense in particular directions which are shared by a large number of persons, but not by all. Thus the common sense of women will naturally differ in certain respects from the common sense of men. Women are often credited with possessing more *intuition* than men, and, so far as there is truth in this judgment, I should say that this so-called intuition is a variety of common sense. We are, on the other hand, frequently told that, as a set-off to female intuition, men are superior in logical intellect, scientific penetration, or creative imagination ; but how much of this apparent superiority is not due to one or other or all of the facts :

(1) that the higher education of the intellect has been for long ages the prerogative of the male; (2) that the economic stimulus of having to earn a living has fallen chiefly upon men, and (3) that the social stimulus of conventional approval welcomes any displays of intellectual eminence (if not coupled with too much heresy) on the part of men, while it regards the manifestation of similar talents by women with coldness or suspicion? Be these questions answered as they may, no one will deny to woman her full share of common sense.

CHAPTER II

COMMON SENSE IN THE LIGHT OF DISCURSIVE REASON¹

TAKING the foregoing sketch as fairly representative of what is meant by common-sense knowledge, I propose to analyse this knowledge in such a way as to show that it occupies a permanent place of its own in human life, having a fairly definite and strictly limited scope ; needing to be supplemented in various directions by science and philosophy, by technical and moral training, by the inspiration of ideals ; yet supplying a fundamental outlook and certain implicit criteria of action which no sort of education or culture can afford. Whatever may be the precise value of the late Shadworth Hodgson's philosophy, as set forth in his *Metaphysic of Experience*, I think he is undoubtedly right in maintaining, not only that common sense is the first thing which philosophy has to explain, but that, philosophically speaking, it requires to be explained, and must not be taken as affording its own sufficient justification. Philosophy needs to go behind the concrete imagery which common sense, together with those concrete sciences which start with the common-sense conception of objects, simply accept. It proceeds to criticize, though not necessarily to confute, these common-sense assumptions ; to show how certain familiar beliefs, which are beliefs in living

¹ By discursive reason I understand reason as employing articulate language or its written symbols.

persons and other extremely complex objects acting under all the complexity of conditions which constitutes reality, are derived from those elementary facts of experience which do not admit of explanation in themselves, since they furnish the ultimate meanings of things—the grounds of all possible explanations. While thus accepting Hodgson's philosophical ideal, I cannot at all points accept his analysis of experience, and I hold, moreover, that it is possible to abstract, from the whole of experience, that familiar part which may be properly described as common sense, and to examine it in its own character more closely than is done by him. But common sense is not only a part of experience; there are two aspects of common sense, corresponding to the distinction between consciousness and personality. Common sense is actually manifested at successive moments of conscious life; but the term does not refer simply to this series of manifestations. It refers also to the permanent tendency or disposition to think and act in common-sense ways. In other words, it is a part of personality as well as a part of experience. Personality is a group of more or less fixed tendencies to become conscious in particular ways under particular stimuli; the whole group falling into two interdependent groups, usually distinguished as character and mind. Character includes the tendencies to think, feel, and act, as they occur spontaneously or with social and practical interests, rules, or ideals in view; also the sentiments of approval and disapproval by which our ideas of, or thoughts about, any persons, things, actions, or conditions are accompanied. Mind includes the tendencies to observe and remember, study and learn, question, reason and judge, when having in view either the attainment of true knowledge or its systematic application to definite purposes, and also includes the tendencies to imagine

and create under the poetic and æsthetic impulses. If we accept these definitions, common sense comprises some part of character and some part of mind, as well as some part of the actual process of consciousness, and it may be defined as follows :—

Common sense is that part of the whole process of consciousness, and of the whole complex of personality, which tacitly infers the existence of self and surrounding objects, conceived as singular, concrete, and fundamentally material entities, and which also tacitly infers so much of the natures of the things and persons which come within range of our individual experience, and so much of our own powers of action, as enables us to act towards those things or persons in ways efficacious for the attainment of the more obvious and commonly accepted, rather than of the more momentous or ideal, ends of life.

Thus regarded, common sense is a natural product arising in every normal individual's experience, though it is better developed in some people than in others, and varies in the direction of its development. At the minimum it is the especial mark, and one might almost say the substance, of *sanity*. It is here equivalent to that fundamental *reason* which is said to be lost by those mentally deranged, some of whom retain much of their discursive reason, or power of expressing thoughts connectedly in language.

Common sense is not a faculty of judging *a priori*. It is the product of our past experience of surrounding things and our own actions in relation thereto. Its intuitions, if they may be so called, are not intuitions in Kant's sense ; they are not pure perceptions and do not precede the process of reasoning from sense-data, but result from an intuitive application of that process—intuitive in the sense that it is not dependent on deliberation and logical expression, not in the sense that it is

not dependent on logical inference of an informally inductive kind. Common-sense knowledge comes from "using the senses"—that is to say, from attention to, followed by memory and recognition of, sense-impressions, more especially those of touch and sight, and by spontaneous associations of the ideas based on those impressions. Such associations doubtless occur before the child acquires the use of language, and they continue to take place independently of its use. It is indeed impossible for discursive reason to retrace the multitudinous repetitions, variations, combinations, and permutations of experience on which common-sense knowledge is based. I believe, however, that it is not impossible, though it is sufficiently difficult, for discursive reason to review and approve the general process by which common sense arrives at its familiar certitudes.

These certitudes go back to actual contact with certain aspects of objective nature, including relations with our fellow human beings as objects in nature, and including the physical facts of conversing with and receiving oral instruction from others, but excluding most of the ideas and beliefs which are verbally conveyed, or rather evoked. What the child learns from imitating the purposive movements or attitudes or manner of articulation of its elders is an increment to its fund of common sense; not so, what it learns from listening to a lesson or reading in a book. That may be sound information, but is not common-sense knowledge. Common sense thus contrasts with the exercise of the discursive intellect; with all which man imparts to man through the instrumentality of language, except when language is used for immediate purposes of practical intercourse, such as giving instructions how to act, or directions how to reach a given place, or conveying praise or blame, or

simply polite greetings. Consequently common-sense knowledge contrasts with the great body of discursive culture—with philosophy, history, the sciences, imaginative literature, religious beliefs.

The assurances of common sense are not based on authority. They are not common traditions, but individual inductions from a sort of experience which is common to all men, while it is closely associated with what is private to each individual. Each derives experience from his own bodily organism and brain as affected by his own actual relations to familiar persons, personal possessions, places of abode, means of travel, etc. These factors of self and environment are all relatively unique in themselves, and their interaction results in a relatively unique experience for each person; but that they have generalizable aspects is clear, and clearly implied in the above brief description of them.

Although distinguished from discursive judgment and reasoning, common sense is, as may be judged from the outline already given, speculative as well as practical. When it is practical—that is to say, when it tells us how to act—it presupposes some cognition of the circumstances in which the action takes place. Although it does not *formulate* speculation, as is done by the realistic or common-sense philosophy which follows in its wake, it has a speculative outlook upon the world, or upon that part of the world which constitutes the individual's near environment. This outlook may, indeed, be termed realistic, but it is not a theoretic realism which excludes all forms of idealism; for common sense, as such, does not dogmatize in the way that many of its interpreters do. Neither, of course, does it give an impartial account of itself such as I am here attempting to give; for it is probably needless to remind the reader that the present essay is an effort of discursive reason.

It is an effort to know common sense better than common sense knows itself; for common sense does not reflect on itself as a psychological fact. When, however, discursive reason reflects on it, it is seen to be a psychological fact which contrasts in various ways with the psychological fact of intelligent discourse, though the two processes overlap at certain points. It is this antithesis which goes far to explain the perennial rivalry of the materialistic and idealistic schools of thought. To my own thinking we have here one of those complementary oppositions, or *duomodalties*, which continually occur in the rational interpretation of experience. Common sense supplies what, like its basis in human animality, is relatively fundamental and necessary to human life; while discursive reason supplies what, like its apex in human ideality, is relatively exalted and delectable. Neither, taken by itself, envisages the whole reality of nature; for, if common sense comes nearer to the reality of *things*, discursive reason comes nearer to the reality of those *relations* which make the universe, considered as something more than a jumble of concrete particulars.

It will here be well to state that I use the term "reason" in a broad sense, covering not only ratiocination, but the whole of human intellect, or understanding, and even animal intelligence—in fact, all mental process which *relates* percepts or ideas of objects. Wherever there appears intelligent judgment, expressed or unexpressed, this is reason. On the other hand, the presence to the mind of a mental image or of a name-notion, before anything is judged about it, falls short of being reason, as, of course, does the unintelligent repetition of propositions which evoke no connected meanings in the mind.

My object in the following Chapters III to VIII will

be to analyse common sense, with no more reference to discursive culture than is required for marking the boundary-line between the two sorts of intellectual acquirement. In Chapters IX and X, I shall endeavour to show that common sense needs to be supplemented by the organization of thought on a philosophical basis, and to indicate some bearings of the present investigation on the great problems of knowledge and causation, the fuller discussion of which must be reserved for a future treatise.

I will conclude the present chapter with a brief outline of the ground to be covered in Chapters III to VIII.

In Chapter III we have to consider the origin of common sense in consciousness. This will be found to consist in the formation of mental images—an order of ideas prior to logical concepts. Common sense functions through mental imagery, and spontaneously infers the probable behaviour of objects represented in imagination. It does not, like discursive reason, start from the meanings of terms, and proceed through explicit judgments to logical conclusions. Mental images inferentially correspond to individual material objects, and it is in this inferential correspondence that the familiar duomodality of mind and matter first asserts itself.

From the origin of common sense we must pass to its developed nature, which involves the duomodality of speculation and practice; some speculative outlook necessarily preceding any practical function, since automatic and unintelligent action is not practice, properly so called.

The speculative outlook of common sense is marked by its attitude in presence of the contrasted categories or modes of the concrete and the abstract, the singular and the universal. While discursive reason is chiefly concerned with what is universal, if not also abstract,

common sense always subordinates these two modes to their complementary opposites, the singular and the concrete. It eschews the philosophical hierarchy of universals—of Platonic “ideas” and supposedly eternal “laws” of nature. It conceives time as centred in the living present; space as centred in that place where the individual happens to be; reality, as the existence of the corporeal self among other idiosyncratic persons and things.

The ascendancy of the *concrete* in common sense will be discussed in Chapter IV. Common sense envisages concrete material objects, including persons, and including the corporeal self as the central object to which all others are nearly or remotely related. It views these objects both as at rest and as in motion; but in either case it instinctively attributes to each object all the characters which it is known from experience to possess. It does not, like discursive reason, contemplate form as such, motion as such, or consciousness as such. It does not disentangle the qualities which appear to discursive reason to inhere in objects, or the relations which appear to subsist between them.

The ascendancy of the *singular* in common sense will be discussed in Chapter V. Common sense concerns itself not only with objects as concrete, but with particular individual instances or local groups of such objects. It thus views the world as a contiguity of objects extending through the space which centres in one's own body, and persisting, though with endless internal changes, through that objective time of which the duration of one's own life is an experientially known part.

Passing to practical common sense, we shall find that this involves the consciousness of freedom to move in all directions in space, and freedom, at any moment of reflection, to act or not to act in some particular way,

with some proximate end in view. Practical common sense generally accepts certain recognized aims in life (aims which a moralist might describe as normally selfish and normally worldly), and does not afford any strictly ethical criterion of conduct, being exhibited more especially in the choice of efficacious means to desired ends. There are two spheres in which such choice is exercised, the physical and the social; physical common sense being the principal topic of Chapter VI, and social common sense that of Chapter VII. The former is concerned with bodily and manual movements, and is almost wholly independent of language. The latter is concerned with the individual's social relations to persons who come within the circle of his acquaintance. These relations are largely dependent on the use of discourse in conversation, letter writing, legal documents, etc., as bearing on personal and practical affairs. Such speech and writing are essential ingredients of social action, and social common sense includes the tendency to employ them judiciously. It does not, however, afford any criterion for correct judgment in the abstract, scientific or philosophical, use of discourse, any more than it affords a criterion of values in the æsthetic arts.

Having discussed both speculative and practical common sense, as pertaining to the typical individual, it will be necessary in Chapter VIII to glance at the sociological implications of common sense. It will be maintained that a high average of common sense is one of the chief factors in true civilization, and that in civilized common sense, as contrasted with the deficient common sense of savage and barbarous communities, the philosophical idea of Nature and the democratic ideal of liberty are both implicitly present.

CHAPTER III

MENTAL IMAGES AND MATERIAL OBJECTS

AS already noted, common-sense knowledge is not necessarily expressed, and much of it is never expressed, in language. Fundamentally it depends upon an order of ideas which are not concepts in the logical sense, and which I propose to term *mental images*. A mental image is essentially subjective in itself, but has an essentially objective reference. It is quite unlike those extraordinary images of Bergson's, which stand midway between the material and the mental, and, as it seems to me, do nothing but obscure the natural process of acquiring knowledge.

The mental image of an object begins to exist when something handled or seen is recognized, not merely as similar to what we have handled or seen before, but as the very same thing which we previously perceived. This sort of recognition of course involves the inference that the object has continued to exist, or has retained its identity, through the interval wherein we did not perceive it. This, again, is tantamount to the inference that the object is something more than, at any particular time or series of times, we perceive it to be; being independent of ourselves, and being one direct cause of all the perceptions, and one indirect cause of all the memories, which we have of it. A given individual person or thing may be re-perceived many times in the same day, each time from a somewhat different point of view, and under other varying circumstances; but the

whole series of perceptions derived from such a person or thing coalesces into a single memory-complex, which is the mental image as it exists independently of imagination, in the ordinary sense of the term ; for this imagination invests it with subtle modifications due to our own emotions or sentiments. Each fresh perception of the object strengthens the subjective identity of the memory image, and this image is frequently called to mind when the object itself is known to be absent. It may be called to mind by aid of the proper, or other singular, name by which we denote the object ; but names, which are essential to the recollection of general ideas, are by no means essential to the recollection of mental images. With or without the name, there is some visual or tactual or auditory memory-image which consciously represents the object, vaguely suggesting all the other memories that we have of it.

Although a mental image means much more than a visual image retained in memory, it is usually the visual imagery of a person or thing which forms the psychic nucleus about which many associated characters are grouped in the mental image. Even had we no sense but sight on which to base our mental images of external objects, such mental images would still be formed through the spontaneous combination of the many different visual images which are derived from the self-same object, according as we observe it from different points of view. The object would still be conceived as uniting in itself permanently—*i.e.*, permanently while it exists—all those different parts which can be seen by us only at successive moments, and some of which could be seen only if it were actually dissected. The mental image involves at once a sub-conscious tendency, and some amount of conscious striving, to reconstruct this object in thought. Such reconstruction is, of course, subjective, and always refers

to the object as being already fully constructed in its natural reality. In other words, the object has by its existence actually achieved what the image only tends to achieve—a definite coherence of all its parts, and coincidence of all its actual qualities and relations, in a single concrete unity.

The mental image of one's own body develops *pari passu* with the mental images of surrounding bodies, and it is largely by observation of other persons and animal organisms that we learn what we, as physical entities, really are. Nevertheless, the image of the corporeal self is obviously formed in a way different from that in which the images of external objects are formed. Although we see and touch parts of our own bodies, we cannot see our faces, or our forms fully, except by the aid of mirrors; while our hands and limbs are on the whole better adapted for coping with external objects than for dealing, as in performing personal ablutions, with our own frames. On the other hand, the whole bodily form is, for each person, an extended sense-organ; impressions of touch are derived, though with unequal degrees of acuteness, from all parts of the sensitive skin which envelops us, and (as is recognized by modern experimental psychologists) are repeatedly reinforced by sensations due to the action of muscles, tendons, and joints. Whether walking, standing, sitting, reclining, whether working, eating, or idling, we are constantly having feelings which possess a local reference to this or that part of the body, and of which we are more or less clearly aware, though we may not deliberately attend to them. These feelings combine in a vaguely outlined and anatomically empty, but none the less convincing, image of our own body as such. This is the one object always present to waking consciousness. It is the object which gives us our first rough measures of surrounding things; which measures become, in prac-

tical discourse, "feet," "paces," "ells," "spans," etc. It is the object whose general shape and permanent potentialities of posture and action we come in fact to feel, so that what the artist, and especially the sculptor, imitates and idealizes is the human form, not merely as it can be seen from different points of view, but as it can be felt to be in itself.

Although the mental image of one's own body is formed differently from the mental images of other bodies, being fundamentally a tactual rather than a visual image, it is clear that this mental image is not identical with its object, but infers its object as something contrasted with its own subjective existence in consciousness. The real body has a definite extended form, comparable, not to a sculptor's mental conception of it, but to the finished material image which he makes of it. It unites to this definiteness of form the multiplicity of bodily movements and changed attitudes which the statue obviously lacks. Lastly, its external form is due to the presence of an enormously complex organic structure, and its powers of external movement depend on the functioning of sub-conscious and conscious life through this structure. This inner life of the body is occult to common sense. Hardly any of it is included in the ordinary mental image of self; though, in the case of a person well versed in anatomy and physiology, the mental image of self will contain certain true approximations to the hidden reality of bodily life; while, in the case of a hypochondriac, the image will be overcast by morbid speculations about the organic processes, based partly upon morbid intrusions of organic feelings into consciousness.

It has now, I think, been made clear that the mental image of self, as well as the images of particular persons, places, and things, familiar to ourselves, are complex psychological facts which do not depend upon the names,

though they are generally associated with the names, applied to their objects. Similarly, many of our inferences as to the characters of the objects which we perceive, and as to the way in which they will act towards us, or in which we must act towards them, consist in mental imagery which has no need, and frequently no sufficient time, to express itself in discursive judgments. It is this independence of language, on the part of the mental image, which differentiates common sense from science and literary art alike. We really know much which we cannot, or do not, express in words. Part of this knowledge is expressed by ordinary physical actions, when we act knowingly, but without logical formulation of judgments. Part is, or may be, expressed through drawing or modelling. Part constitutes the raw material of intelligent experience, on which literature and philosophy must draw for everything which is vital in their utterances. These facts do not justify sentimental raptures about the inexpressible ; for experience gains far more in human value than it loses in private interest, by adequate representation in language. Still less do they justify that type of mysticism which advances uncritical and vaguely figurative modes of expression as clues to an ultimate reality which it supposes that the logical nexus of intelligible judgments is incompetent to represent. In some respects true poetry or true literary art may, through its opulent conceptions of what is concrete and unique, and through the embodying, in life-like description or forceful metaphor, of the principles and ideals which philosophy views in their logical abstraction, achieve that nearness, or adequacy, to reality which mysticism vainly arrogates ; but poetry, unlike mysticism, does not seek to rival or to supplant philosophy and science : its inspirations are natural and its revelations non-dogmatic.

CHAPTER IV

THE ABSTRACT SUBORDINATED TO THE CONCRETE

WHILE common sense uses mental images, it does not speculate about them. So far as it speculates, it concerns itself with the real things which the images self-evidently represent. These things comprise our bodily selves, together with such other persons, and such animals, plants, masses or volumes of inorganic substance, and manufactured objects, as are frequently encountered in daily life. All such things are conceived as being at once (*a*) concrete material objects, which may be natural parts or collective groups of individuals proper; and (*b*) singular instances of the kinds to which they belong, the identity of each object or group being known by the fact that it occupies, at any given time, its own place in relation to surrounding things.

Common sense may make a certain implicit use of concrete-general and even of abstract ideas, as well as of mental images; but it always understands that the foundations of a class of things are the things themselves, that the characters of the class are simply some of those characters which belong to its individuals individually, and that each individual has its own complete set of characters, in some of which it may happen to vary from all other members of its species.

While discursive reason abstracts, or ideally disentangles, the qualities and relations of things, common sense always subordinates the abstract to the concrete,

and views the attributes of things intensively, not as being, like particular material parts, *spatially within*, but as being *really centred in* themselves. The mental image vaguely infers, without ideal separation, all the qualities (including habits of movement and speech, where habits of either kind are present) which experience teaches us to associate with its object. It infers, as a basic character, the solid spatial form of the object, which is ascertained, partly from seeing it from many different points of view, partly from handling or otherwise touching it (or objects known to be similar to it) at many different points, and partly from the manifold adjustments which take place, in normal bodily activity, between the visual image of the object and the subsequent tactual feeling experienced when we act upon it or it acts upon us. But, in common-sense imagery, the refinements of geometry are absent, and the pure form of the object is not abstracted from the various other impressions which it makes on us. Its hardness or softness, its roughness or smoothness, its weight if we lift or push it or if it presses against us, its heat or coldness, its colour and brightness or dullness, its taste if placed in the mouth, the sounds or the odour which it emits, its habitual movements, and, in the case of persons, the feelings or intentions which they have signified or we have inferred—all these memorized items are bound up, in common-sense imagery, with the object's characteristic form.

I think, however, that the philosophical distinction between primary and secondary qualities is understood, though not logically formulated, by common sense. Physical impulsion, resistance, and weight are not merely the impulsion, resistance, and weight that we *feel*; for we *see* the effect of these factors in the relations of things external to ourselves, having already inferred

the reality and general character of those things in the way before described. We *see* that a hard object resists an impact which would shatter a brittle, and crush or cut or indent a soft, object; that a tough cable bears a strain which would snap a weak one. We *see* the effect of weight in the fall of a heavy solid, which may lead to the flattening or fracturing of its own form or of the form of some other object on which it falls. More systematically we *see* the effect of weight in the balancing of objects against other objects whose weight has a conventionally ascertained value. Thus *primary*, or properly physical, qualities—such as weight, rigidity, toughness, plasticity, elasticity, fluidity—are naturally grouped with spatial extension, solid figure, and measurable magnitude, as constituting what, for common sense, is the thing in itself; namely, the thing in its physical relations to other physical objects of all sorts, and not merely in its special relations to human beings, through their sense organs. On the other hand, colours, sounds, odours, flavours, and felt heat or coldness are *secondary* qualities, which have no meaning as involving relations between objects at large, but only as involving relations between objects and our own, or at least animal, consciousness, through the specialized organs of sense. Facts of pure consciousness are what may be called, from the common-sense point of view, *tertiary* qualities of the living person. They are wholly withdrawn from sensuous observation, and, so far as they exist in others, are indicated to ourselves only through the physical signs of performance, speech, and gesture; while, so far as they exist in ourselves, they are known, more immediately it is true, yet not, to common sense, in such a definite way as either the primary or the secondary qualities of our own bodies and of surrounding things.

Ordinary observation assures us that the things which are perceived as having primary qualities in relation to one another are the same things which are known to ourselves through impressions of colour, sound, etc. It also assures us that the persons whom we infer to have the tertiary qualities of thought, will, and affective feeling are the same persons who are known to us as possessing the primary and secondary qualities involved in bodily form, physiognomy, and complexion, recognized habits of action, deportment, and speech, tone of voice, etc. In short, the concrete object is known to common sense as the whole bundle of its primary qualities, including its distinguishable parts, together with its secondary qualities, and, in the case of an animal or human being, its tertiary qualities. These various attributes are set forth in logical description as so many different predicates successively applied to the same subject ; but description which thus ideally separates and reunites the qualities of things is a departure from simple common sense, making explicit what is only potentially present in the mental image. In the early stages of this discursive process many errors of popular judgment occur ; but these are not, properly speaking, errors of common sense. Thus, when common sense is accused of supposing that secondary qualities (especially colours) actually inhere in objects, the accusation is unfounded. The false supposition is really due to the imperfect discrimination exercised by discursive reason of an immature sort. It is due to secondary qualities being *predicated* of certain objects (or of the logical subjects which stand for them), as when we say "this rose is red," and the predicated colour being then regarded as a simple attribute of the object, whereas it is really a product of the relation which that object has, through the human visual apparatus, to the consciousness which translates certain

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vibrations of light into the feeling of redness. That the secondary qualities of objects are due, on their physical side, to a subtler order of primary qualities and relations subsisting in or between the finer particles of matter, or of matter and ether, is a scientific discovery which common sense could not be expected to compass; but common sense, as such, is guiltless of dogmatizing, or of denying any scientific inferences about the qualities and relations of things. The fault, when there is one, lies with discursive reasoning or judging of an uncritical order.

If common sense does not give the geometrical abstraction of form, neither does it give the physical abstractions of motion and energy or the biological abstraction of life. Its imagery may be either static¹ or kinetic; but, if kinetic, it shows corporeal objects in motion and knows nothing of unextended centres of force. Nor does it know anything of life, except as belonging to things which live, and being inseparably connected with their concrete natures.

¹ Not that the image, as a process-content of consciousness, is ever static in itself, but that it envisages something as at rest.

CHAPTER V

THE UNIVERSAL SUBORDINATED TO THE SINGULAR

IN science we have to deal, not only with abstract ideas, but with concrete-general ideas, such as those of minerals, plants, animals, and artificial objects, in their various orders, ending in determinate species---*e.g.*, felspar, oak tree, horse, motor-car. But no concrete species, and much less any concrete genus, is ever encountered in its logical extension. What we experience or directly infer from experience to be present are single instances of a species or small collective groups of individual objects. It is of such single things and groups that we form mental images, as opposed to specific-concrete-general ideas. These latter, together with the more generic and abstract ideas, are indeed tacitly implied in the mental image; but all such discursive notions are, by common sense, strictly subordinated to the interest attaching to the unique persons, things, and places among which our lives are spent, and *many of which are denoted by proper or singular names whose application and implications are private to and understood only by the members of a family or some similar group of mutually acquainted persons.*

Objects which, like two penny postage stamps or two dinner plates of the same service, are undistinguishably alike in character, are perfectly distinct to common sense, owing to the fact that at any moment they occupy distinct places. In science, the segregated cells in any

portion of a given organic tissue and the molecules in any mass of a given chemical substance are conceived as distinct in the same sense. But among objects whose dimensions bring them within range of the sense of touch, or of sight as directed upon terrestrial surroundings, it is the exception rather than the rule for any two things to be simply counterparts of one another. While all individual persons who come within our sphere of observation have their idiosyncrasies of feature and character, other idiosyncrasies, if less marked, belong to the great bulk of inanimate objects, natural and artificial, by which we live surrounded; and such peculiarities are reflected in the mental images of all things with which we become individually familiar. We may attempt to describe them in terms; but, if they are visible traits, they can be infinitely better represented by drawings, and if they are peculiarities in the production of sound, such as tone of voice and manner of speaking, terms will only represent them in a remotely symbolic fashion. In any case, however, they will be implicitly referred to by the mental image formed after repeated experiences of the object which manifests them.

While the world is known to common sense, broadly speaking, as the multitude of peculiar objects surrounding that peculiar object, one's own body, it is known, more accurately speaking, as the personally-explored part of the earth's surface, wherein there are not only a number of peculiar objects, but a number of peculiar groupings of stationary objects in particular places. These groupings constitute recognized scenes, each of which evokes a mental image growing in definiteness as it becomes increasingly familiar. In crossing an ocean or a desert the traveller experiences uniformity of surroundings, despite the continual change of place; but, when on land and in normally diversified country or in the streets

of a city or the passages of a house, every few paces introduce us to a changed, and it may be to a completely changed, scene; and, when certain of these scenes have been repeatedly re-viewed, particular stationary objects become landmarks, in relation to which our movements are intuitively oriented. At the back of all changes of place we are aware of the continuity of space; not, indeed, of space as a geometrical abstraction, but of space as the unbroken extent of the atmosphere through which we are accustomed to move, in its connection with the unbroken extent of the land, or of land plus expanses of water. That those tracts of the earth's surface with which we have actual personal acquaintance are continuous with other tracts which we leave unexplored is a natural corollary to this empirical continuity of terrestrial space. The corollary is further confirmed by the testimony of persons who have travelled from places which we do not know, but the direction of approach to which we do know.

Every individual guides his steps in known localities by landmarks which he recognizes by sight, but not necessarily by name. The sense of locality is thus a form of common sense which precedes the public naming and discursive study of places as given by topography and geography, and also of course precedes the astronomical study of the bodies in cosmic space. Geography and astronomy are, however, sciences which extend the outlook of common sense, rather than transcend it in the way that is done by the general and abstract sciences. They are based on the singularity of certain natural objects—features of the earth's surface and celestial bodies—each of which must be recognized by the common sense of certain individuals before it is recognized by the cultured human community and acquires a universally accepted proper name. The

higher developments of geography and astronomy, however, depend on an application of geometrical and other abstract principles, and take us far beyond the range of common-sense verification. The ancient belief in a flat and stationary earth, poised at the centre of a revolving celestial sphere, was an eminently natural speculation ; but it was essentially a theory—a piece of immature science—and it would not be fair to charge common sense with the fallacy which it involved. Here was an attempt of discursive reason to explain the visible world, while only a small part of the earth's surface had been explored, and the means of astronomical observation were correspondingly primitive. The heavenly bodies and "the ends of the earth" always lay beyond the sphere of common sense, which is the sphere of possible personal action, wherein the character and real dimensions of distant visible objects can be tested by the tactual process of walking, or otherwise travelling, to the place where they are.

The duration of objects, including our own bodies, is a fact no less patent to common sense than their extension. It is, indeed, a fact which coincides with their objective existence. For an object to cease to endure is to cease to exist, and objects which have not yet evolved or been manufactured—*i.e.*, begun to endure in the objective process of time—do not yet exist. As was previously said, in discussing the mental image, the recognition of an object as identical with itself (not merely as one kind of thing, but as one thing in concrete actuality) involves the inference that the object has continued to exist during the interval or intervals wherein we have not observed it—in the case of our own body, during the intervals of sleep. Herein lies one of the chief distinctions between object and image ; the image appears, disappears, and reappears many times, or has

many transient existences, while the object continues in its one spell of existence. In other words, the image is really a series of appearances, no two of which are identical in time, and many of which are far from being wholly identical in subjective content. These stand in relation to a single object, whose unity in space is prolonged by continuity in time. That the image may, in its own subjective way, survive the object, when the latter—a thing or person external to self—has undergone disintegration or death, is yet another ground of distinction between the two. So is the fact that visible material objects of a few kinds, such as bubbles and drops of liquid, when rapidly formed and dispersed, may be shorter lived than any mental images which can be formed of them. Such exceptions serve to throw into relief the general rule that material objects of visible dimensions are much more durable than their correlative images. ✓

Common sense does not, however, speculate on the succession of mental images, or on the process of consciousness in which they occur. We reflect upon this process only through discursive notions such as constitute the subject-matter of introspective autobiography and psychological analysis. It is, on the other hand, the objective duration of the body through all the past situations which we remember it to have occupied or infer that it did occupy, coupled with the objective duration, for longer or shorter periods, of familiar external objects, which give us the common-sense idea of time.

This objective time is measured naturally by days, seasons, and years, and artificially by timepieces marking such units as hours and minutes. It is the necessary accompaniment alike of the multitudinous movements which take place among objects, and of their relative

states of rest; alike of the continued duration which long-lived objects possess, of those changes which constitute the birth, growth, or manufacture of particular objects, and of those other changes which constitute the death or disintegration of particular objects. We ourselves endure while we live. That mother earth, our human parents, our country and nation, and a multitude of other physical and social conditioning realities have endured in the past and made our own lives possible is partly an inference of common sense and partly a fact vouched for by the testimony of our human teachers. In extending our knowledge of the past which we do not personally recollect, from a vaguely imagined lapse of time to a succession of periods having characteristic contents, discursive reasoning must, of course, come into play. History and scientific chronology do for the representation of objective time what geography and astronomy do for the representation of objective space.

We have seen that, while common sense must not be credited with that true theory of the universe in space which is due to the advance of astronomical science, neither ought it to be debited with errors such as those involved in the geocentric theory and the flat-earth theory. These were natural speculations of a pseudo-scientific kind. Still more remote from common sense are all cosmological and theological theories as to the ultimate nature of the universe or its origin in time. The belief in a God-Creator has never been universal in the sense in which the belief in a flat earth must at one time have been universal; but, even if it had been so, this would simply imply that, at a certain stage of mental evolution, discursive reason sought to explain the universe on the anthropomorphic analogy of the potter, or the architect, or the watch-maker, and his work. Such an explanation cannot claim the support of common

sense. Although the processes of natural growth and causation are very obscure to the unscientific mind, common sense does familiarize us with the facts that plants grow from seeds, and that many natural objects have their origin through the gathering together of what were previously dispersed material particles. Thus the speculation which regards all natural happenings as due to processes of integration or disintegration of pre-existing matter is more in line with common sense than is the speculation which invokes a supernatural cause of nature; though neither speculation is a judgment of common sense, properly so called. The things which common sense speculates about are the things which our bodies (or, in the case of fellow human beings, our signs and spoken words) act upon, or which act thus directly upon ourselves. Our practical relations with these things are constantly modifying our speculative knowledge of them. Where such practical relations are out of the question, as in propositions about the universe, the infinite or absolute, final causation or creative power, the propositions are speculative in a way very different from the speculative inferences of common sense. They are attempts of discursive reason to explain the order of things familiar to common sense, on principles of interpretation which arise solely through logical reflection; and such attempts can be justified, if at all, only by a further exercise of logical reflection in logical argument.

CHAPTER VI

PRACTICAL, INCLUDING PHYSICAL, COMMON SENSE

IN turning from the speculative outlook of common sense to its practical functions, we arrive at its *raison d'être* in the will,¹ which uses the intellect for its own pragmatical purposes, not for the scientific and cultural purposes of intellect as such. Practical volition is indeed the one fact of subjective consciousness which may be said to come within the express cognizance of common sense; since the latter does not reflect upon the æsthetic quality of sensations, or the moral quality of affective feelings, or the validity of conceptual thoughts, but does reflect upon the alternative possibilities of action which are continually presenting themselves in life. Without such reflection there could be no choice, or so much as the appearance of choice, and consequently no practice, properly so called. The practical cognitions of common sense are, however, concerned only with suggested actions in relation to surrounding things and persons; while common sense, considered as a principle of preference, pursues proximate utilities only, and knows nothing of ideal ends. It accepts, without criticizing, the ordinary aims of life, and shows itself in conscious adaptations to the near environment, physical and social. Its strength lies in spontaneous estimation of proba-

¹ The will must not, however, be considered as an entity, but merely as the practical aspect of the whole personality, which, in its turn, is the psychical aspect of the whole person.

bilities and the selection of right means for achieving recognized purposes. It tends to prudence and moderation, and, on its social side, to patience of temper and sobriety of judgment. It does not, like strong personal ambition or enthusiasm, subordinate present action to a distant, but constantly envisaged, goal. Strength of purpose may, indeed, use common sense; but common sense does not necessarily involve strength of purpose. Neither does it involve a sensitive conscience, though it agrees with conscience in furnishing practical promptings which are intuitive in the sense of not being based on deliberate reasoning. (Our sins against common sense, like our sins against the conventional proprieties, are sometimes followed by severe pangs of regret, though we know they were not breaches of any law involving moral principles of vital importance, such as justice, kindness, veracity, and self-control.) If common sense does not, like conscience, provide a subjective standard of morality, still less does it compete with discursive reason of the ethical kind, which seeks to subordinate all action to a supreme good, or (on one view of the problem) to discover and cultivate in ourselves that essential *ego* which underlies the surface self, with all its conflicting passions and irrational prejudices, all its dogmatic assurances, pedantic questionings, rash impulses, and feeble hesitations.

We may distinguish two sorts of practical common sense, physical and social. These do not always go together in the intellectual equipment of the individual; since different sorts of experience are required for their respective developments. A sufficient variety of manual training and eye training is needed to develop physical common sense, while social common sense can be acquired only much later in life, and is developed through mixing with men and women of all sorts and conditions.

But neither physical nor social experience suffices to produce the appropriate response in mind and character, apart from the innate tendency to observe, reflect, and base sober anticipations of the future on accurate memories of the past, while making due allowance for changed circumstances in the present. It is this tendency which is the essence of practical common sense in both its manifestations. Presence of mind in unexpected emergencies may perhaps be defined as practical common sense at short notice; since it involves an alacrity of perception and decision which "common sense" does not always connote.

For practical common sense, space and time are simply the immediate conditions of action. They are the concomitant dramatic "unities" of the life-play in which each of us acts his part, its changing scenes being determined for each person by the immediate range of his own senses, while familiar persons and places not presently perceived are, as it were, realities behind the scenes. As apart from their quasi-dramatic unities, the ulterior universal unities of time and space do not count. It is not the abstract quality of extension, nor the whole of cosmic space, nor any remote parts of that space, but simply the particular part which, at any moment, centres in one's own body as related to the earth beneath and atmosphere around it, which is the immediate condition of personal action, giving us the normal freedom to move towards any point of the compass. Similarly, it is not the abstract quality of duration, nor the whole of cosmic time, nor any past or future time, but solely the present passage of time occurring at any place in which we may happen to be, which gives us the opportunity to act; while it is some present combination of mental representation with conative feeling which gives us the motive to act; the action either following automatically

or depending upon some further mental representation which shows us the efficacious way of acting.

The freedom of action conferred by the consciousness of local space is the potentiality of an infinitude of bodily movements, a great number of which become actual when we move without definite purpose, as does a child who, in the exuberance of its spirits, runs or dances about and waves its arms in all directions. In contrast to this aimless freedom is the aimful freedom conferred by the consciousness of the present time, as an opportunity for acting in some intelligent way with some definite end in view, when, nevertheless, there is not felt to be any compulsion so to act. This power of choice is, at bottom, a power to perform or to refrain from performing this or that specific suggested action. There are often two or more suggested courses of action between which we seem to choose, and do, in a sense, choose; but, in the last analysis, the choice is always between doing and not doing something definite. For instance, if, at dessert, we have to make our choice between an apple, a pear, and an orange, and thereupon feel and believe that the orange will be nicest, we still have to reach out to take it. There is therefore still an open alternative; still room for hesitation, which may possibly result in a change of mind and inhibition of the suggested movement.

While common sense gives us no assurance of free will, in the sense of action unconditioned by neural processes (which, as already stated, are simply occult to common sense), it does give us the twofold assurance—first, that we are free to move in all directions where there are no obstructions, and where the body's gravity allows; and, second, that when a definite line of movement is mentally suggested, but not forthwith instinctively followed, there is freedom to act or not to act in

that particular way ; a freedom which is relative rather than absolute, but which at any rate contrasts sharply with the automatic character of reflex or purely instinctive actions and unintelligent routine. This freedom is proportionate to the impartiality with which reason weighs the positive against the negative suggestion. The will may be frequently induced to adopt an alternative which, in the absence of this impartiality, or clear mental representation of diverse consequences, would be rejected by emotional bias or ignored by unthinking impulse. Granting that the fact of deliberating and the outcome of deliberating on a proposed course of action are alike subserved or subtended by physiological processes, it is certain that we do not know what those processes are at the time when they affect us, nor does the psychophysicist yet know what they are in a general sense, though it would be rash to say that he will never be able to give a satisfactory account of them. We do, however, know what was that conscious motive to which we yielded, and do frequently feel that we might have refrained from yielding to it.

In saying that we know the conscious motives to which we yield, I do not mean to imply that we necessarily have a clear consciousness of the ultimate tendencies of our characters ; still less that we necessarily have a clear theory of the ends to which conduct ought to be shaped. But, whatever the ultimate ends of our actions may be, all purposive physical actions have proximate physical ends. The proximate end of obtaining food is the physical action of eating it. The proximate end of a carpenter, in constructing a table, is to have the table as a finished object, which shall integrate in a serviceable unity the various pieces of which it is made. The proximate end of a boat race is the physical achievement of covering the course in a shorter period of objective

time than is required by the rival crew. The utility of the first two of the above objects admits of no dispute. That of the third object might be disputed by some very matter-of-fact persons; but, given the object of winning the race, no one would question the utility of undergoing a proper course of training. Similarly, no one questions the utility of working as a means to obtaining the necessities of life, or the special utility, for a carpenter, of learning how to use particular tools upon given materials. It is, then, chiefly in adopting the right means to recognized physical ends that physical common sense comes into play. Such common sense remains an essential factor in life, though it needs to be supplemented in many directions by technical skill, and admits of being supplemented by applied science and that division of labour due to applied science which tends, for many individual workers, to supersede technical skill by the process of machine-minding. In that process there is still considerable need for physical common sense.

Most of the industrial and also the various athletic and sporting arts are acquired by constant practice, and require, for their efficient prosecution, various kinds of attention, dexterity, and endurance; but physical common sense presides over them all—especially over the learning of them and over any improvements, not due to abstract scientific knowledge, which are made in them. In other words, it presides over the physical arts just in so far as they are something more than skilled automatic activities, and something less than personally understood applications of mathematical, physical, chemical, or physiological science. As simple common sense, it always stops short of the technical proficiency in this or that art which is due to continued practice; but it has the compensating advantage of applying to all the ways in which we can use our hands and limbs, and indicating, in every branch

of ordinary physical activity, the right way to set to work. It is, moreover, physical common sense which enables us to take care of ourselves in various situations of ordinary life ; as, for instance, in steering a safe course across a street teeming with possible dangers from miscellaneous vehicles rushing in two directions.

CHAPTER VII

SOCIAL COMMON SENSE

FOR all who have learnt the art of writing, the freedom to move or not to move in a suggested way includes the freedom to use or not to use the hand and pen for communicating or recording our thoughts. Writing is, of course, a secondary symbolic action referring to the primary symbolic action of speaking, and the freedom to utter or not to utter in speech a particular thought which occurs to us is, like the freedom to perform or restrain some bodily or manual movement, inferred by common sense. "Actions," in human society, consist very largely of utterances—utterances, spoken or written, which indicate not only the logical ideas, but the mental images and associated sentiments or intentions which we have, or at least affect to have, in our consciousness. Kindly or angry, tender or scornful, thoughtful or thoughtless, frank or deceitful utterances contribute, far more than embraces or blows, to make or mar the happiness of ordinary life. Slander and libel, like stealing, are very properly offences at law. Political and forensic rhetoric, commercial puffs, and biassed persuasion of various sorts exercise an enormous practical force in the world—a force which philosophy may deplore, but cannot ignore.

Utterance, or discourse, as I shall generally call it, may be *pragmatical*, in the above sense of constituting an immediate moral or social action, or it may be

cultural. In the former sense, it is a function of character; in the latter sense, a function of mind. The method of culture is contemplative, and its aim educative. It seeks to supply mental nourishment or moral stimulus to listeners or readers, but does not urge any definite lines of action on particular individuals or groups. Philosophy, history, science, and imaginative literature are cultural in this sense. They point beyond the narrow sphere in which personal interests, affections, and animosities hold sway, and even beyond the broader spheres in which political and religious party feeling rule. They make an appeal to world-wide human thought—an appeal which may have ultimate effects upon individual and collective action, but which always aims at truth rather than at immediate results. They transport us into the region of universal ideas, and into the complementary region of those singular ideas which, like the notions of the particular celestial bodies and the earth, of the astronomical and geological ages, of the far-branching families of plants and animals as evolved during given periods in given areas, of particular human races and nations and noteworthy individuals, are of permanent interest to mankind.

In contrast to this cultural discourse, the discourse which I call *pragmatical* does not pretend to state truths of permanent interest, but uses language with reference to the persons, places, things, and conditions which form our individual environment, or with reference to our own past actions or present feelings or intentions. *Pragmatical* discourse is such as is reproduced or idealized in the drama, in which most of the cultural discourse appropriate to a philosophical treatise or dialogue is evidently out of place. It is the discourse in which love and friendship declare themselves, and in which quarrels are fomented or allayed. It is the discourse

which conveys praise or blame, issues commands, offers advice, solicits favours, grants or refuses them, returns thanks, makes apologies; the discourse which expresses, on the one hand, interest, commiseration, gratulation, admiration, confidence, friendship, and, on the other, nonchalance, repugnance, envy, contempt, suspicion, hostility. It is the discourse in which parents address their children, tradesmen their customers, lawyers their clients, doctors their patients. It is used alike in social amenities and official communications. It enters into that part of political discussion which is concerned with the actions of existing political parties, party leaders, or high officials, as opposed to that other part which treats of the general causes or right principles by which political actions are or should be conditioned.

Pragmatical discourse, as associated with tone and manner of speaking, with gesture, deportment, and facial expression, and as employed in family or public life and in the various social arts and professions, fundamentally by way of conversing, but also by way of correspondence, forms the principal outward expression of social common sense. Inwardly, such common sense affords an implicit criterion of action, involving selection of the right means for achieving proximate social ends; but there are several other criteria which have to be associated with it in any philosophy which may seek to systematize the individual's social activity. There is conscience, the law of the land to which we belong, and reason, in its highest ethical sense, which, in seeking the just, the true, and the beautiful, as factors in the ideally good, tends to correct and enlighten conscience itself, and makes for progressive legislation which will repeal bad laws as well as enact beneficent ones. But just as discursive reason, without a basis in common sense, cannot lead to truth, so ethical reason, without a basis in conscience, cannot lead to

worth of character. Nor can society progress without a pre-existing basis of social order. Thus, though actual laws may deviate in many respects from ideal justice, social common sense, in a truly democratic community, will respect even when criticizing them, simply because they are the laws tacitly approved by the nation as a whole.

Other criteria by which social common sense needs to be supplemented are those of proficiency, applicable to special social arts, and the codes of ceremony and etiquette recognized in particular countries or among particular social classes.

Social common sense affords no ultimate criterion of right and wrong, but it makes us practically acquainted with our social environment, and indicates the prudent, tactful, and efficacious ways of acting towards or of addressing others, in order to attain particular ends, which may be good, bad, or indifferent in themselves. It may, therefore, at times, be pressed into the service of criminal scheming ; but it would be even more inappropriate to saddle it with sordid or criminal motives than to represent it as an ethical criterion. When well developed, it discourages all obviously anti-social actions on grounds such as gave rise to the maxim, "Honesty is the best policy." When still better developed, it has a distinctly, though not intentionally, moral effect ; which consists in the curbing of irrational passions by reason, in the shape of honest reflection. The chief passions of human nature are reciprocally related to certain spontaneous modifications which take place in the mental images of self and other persons. That aspect of the mental image which depends upon the accuracy of memory and prior observation, and involves the anticipation that we or others shall feel and act in the future as in the past, is coupled with another aspect which confronts new circumstances and

altered relations, or, it may be, interprets past experience in a new light. It is here that imaginative inference—imagination, not of the poetic, but of the everyday sort—comes to effect many subtle changes in our mental images, some tending to enhance, and others to impair, their value as symbols of particular concrete realities.

It is perhaps inevitable that the mental image of self should occupy a prominence in consciousness wholly disproportionate to the importance of self in the world, and the fact that it does so does not necessarily involve any over-development of self-esteem. If, on the one hand, pride and vanity often assign a fictitious worth to self, there is, on the other hand, a healthy self-confidence in the pursuit of legitimate interests and ideals, the lack of which may wreck, and must enfeeble, the individual's career. It is a common failing, especially among the young, to over-estimate one's own prowess, strength, or skill. It is a common excellence in youth, and in those who retain the enterprising spirit of youth, to dare innovations which are difficult of accomplishment. Both the failing and the excellence in question are connected with imaginative modifications in the mental image of self. Those produced by self-conceit are not true, for in their case the body does not live up to the image formed of it. Those produced by legitimate confidence in one's ability to initiate some action not before attempted are true anticipations of the event, and therefore true modifications of the self-image. It is a function of practical (both physical and social) common sense to curb self-conceit and reduce its pretensions to the measure of that sober self-confidence which can realize its aims.

The mental image of self is consciously related to the mental images of others; these acquiring an importance for the individual proportionate to the love or liking which he bestows on their objects, and, in some cases, to

the fear or hatred with which he has come to regard them. In general the mental images of the men and women who are personally known to us, and even of some who are known to us by public or historical repute only, are liable, on the one hand, to be over-exalted by unreasoning admiration, and, on the other, to be distorted through antipathies of taste, class, race, or creed, or by groundless and unworthy suspicions. Unreasoning love often does for the image of the beloved person what unreasoning vanity does for the image of self; but love which is tempered with common sense begets a wholesome confidence in others analogous to healthy self-confidence—a confidence which may be occasionally misplaced, but is generally justified, and in fact tends to ensure its own justification. There is no greater influence making for true humanity than the trust reposed in the good qualities of another, whether by lover, friend, parent, teacher, or recognized superior. The human being who is the object of this trust is, under normal circumstances, spurred or strengthened to become worthy of it.

Although love and admiration sometimes produce illusory modifications in our mental images of others, it is certain that the antipathetic feelings, such as envy and jealousy, which cause us to impute bad motives and even to suspect wrong actions that never took place, are responsible for a far greater number of delusive imaginations. Many of these have most serious consequences in real life, and many of them would be avoided if social common sense were brought to bear on each case. Such common sense is beneficent, not because it is actuated by an altruistic rather than an egoistic motive, but because it is actuated by the motive to see things as they are; not to attribute unreal perfections to ourselves or our loved ones, but especially not to allow personal antipathies or resentments to get the better of calm judgment in

estimating the motives and characters of others. This just judging, which usually has to be exercised in concrete cases where anything like an exact scientific conclusion is out of the question, is one of the great moralizing factors of human life, and it is also a factor which tends naturally to promote the success and social influence in life of those who possess it.

Notwithstanding the moral value of social common sense, I must repeat that such common sense does not aim directly at moral results. It is not actuated, as is conscience, properly so called, by a sense of duty; whether connected with human sympathy and obligation to others, or with integrity of character and obligation to our higher selves. Nevertheless, common sense has an important function of its own, which conscience does not fulfil. In fact, there are many everyday actions of which conscience has no need to take cognizance. They are morally optional; therefore morally right. They may, however, be still either right or wrong from a prudential point of view; and if right from this point of view, they may admit of being performed (as, for instance, practical directions admit of being given) with different degrees of tact, intelligence, and thoroughness. In these respects they fall within the province of social, or it may be of physical, common sense.

Life can never be altogether rational, in the sense of being consciously lived according to conceptual and ideal rules. There must always be a certain residue of actions, social and cultural, as well as physical, concerning which there is no criterion higher than present personal inclination. In choosing between two dishes at table, two routes which will lead to the same spot, two ways of employing a leisure hour, and in various other sorts of presented alternatives, it frequently happens that there is no question either of morality or of prudence

involved. We must simply please ourselves, or gratify the passing preference which, in these cases, is all that exists to represent ourselves. In contrast to these merely capricious decisions, practical common sense, which is usually associated with the business or professional discipline of work-a-day life, imports rational regularity into the great bulk of our actions, as ethics seeks to import it into actions of the most vital significance.

We have seen that, as physical common sense forms judgments on the right way of effecting proximate physical ends, so social common sense forms analogous judgments on the right way of attaining proximate social objects. Judgments of the former kind are largely intuitive and independent of discursive ideas. Those of the latter kind give rise to what has been called pragmatical discourse—discourse which is addressed by particular persons to particular persons, and which is, for the most part, unpremeditated and spontaneously suited to the situations which arise. As physical common sense presides over the physical arts, but requires to be supplemented by special skill and practice, if not by applied science, in each art, so social common sense presides over the social arts, but does not of itself suffice for proficiency in the more important of them. It requires to be seconded by professional knowledge of civil law, and of other more or less complicated and abstruse systems of social practice.

The co-ordinated actions which constitute the actual procuring from nature, transporting, manufacturing, or adapting to immediate personal use, of any material commodities are, of course, physical arts. Most of these are, however, closely associated with commerce and finance, which depend upon human conventions as to property and money, and are therefore, in themselves,

social arts, as of course are legislation, judicature, the profession of law, and executive government, in all their branches. War, however anti-social in tendency, must be classed as, in the main, a social art, since it is concerned with the relations of rival nations or factions, and of opposed armies which, despite their reliance on the physical factors necessary for compassing wholesale slaughter, are bodies of human beings who depend, for their coherence, on certain ideals of discipline and courage, and are bent on gaining their own nations' or leaders' ends. Organized and ceremonial religion is also a social art, though there may be more than one opinion about its social value. The common characters of religious observances certainly cannot be said to proceed from common sense; while, in passing any judgment on the truth of religious dogmas, we must introduce criteria which belong to the higher sphere of culture—of abstract knowledge and speculation.

It is obvious that the successful pursuit of most, if not of all, the above social arts requires an amount of special discursive knowledge and of special organizing faculty which social common sense alone could not confer. It is, however, to social common sense—to the practical knowledge of men based on personal intercourse, observation, recollection, and correct inference of motives—that the ability to apply the specific knowledge and exert the specific influence required in each social art is largely due.

One may now ask the question: Can practical common sense be cultivated? Clearly it cannot be taught in the way in which the various branches of discursive knowledge are taught; but I think that the direct promotion of physical common sense and the indirect preparation for the later development of social common sense should be deliberately aimed at during all stages of juvenile and adolescent training.

In the interests of physical common sense the child should be taught to construct things with the hands, to measure distances with the eye, to balance the body with ease, and to move with agility and precision. He should be taught to draw, not with a view to producing quasi-artistic copies of one or two selected subjects, but so that his drawings may convey to his own mind approximately correct outlines of as many different natural objects, observed in as many different aspects, as possible.

The preparation for acquiring social common sense later in life should consist in an accurate grounding in one or more living languages, at least in one's native tongue; a grounding directed to its correct vocal, even more than to its correct literary, uses. There should be lessons in conversation and extempore speaking on given subjects, and perhaps in impromptu play-acting; the child players would represent characters in historical scenes, and speak on the spur of the moment as they fancy their prototypes would have spoken. I think, also, that the co-education of boys and girls, and, as far as possible, of students of both sexes, should prove an important factor in cultivating such social common sense as may subsequently apply to the relations of men and women in business and society.

It should, however, be here added that it is manifestly impossible for the adolescent to exercise common sense on the momentous subject of intimate sex relation at a time when the promptings of sex are, for him or her, totally new experiences. This, therefore, is of all subjects the one on which the young ought not to be left without explicit guidance—guidance derived, on the one hand, from the physiology of sex, as frankly and scientifically discussed, and, on the other, from a social ideal of marriage which would tend to improve the units of humanity, physically and mentally, in each succeeding

generation, rather than to multiply the mere herd of human animals. That this ideal must be one of monogamy, rather than of polygamy, polyandry, or promiscuity, may, I think, be taken for granted. Only when father and mother are together bent on promoting their own children's welfare will there be the greatest likelihood of that welfare being achieved. But the reasons which make monogamous union a condition of the fullest human progress militate against that fanaticism of the monogamous ideal which would perpetuate the marriage tie when either party has good grounds for wishing to be released from it. Among such grounds I think one must count a well-considered and confirmed, and not merely passing and capricious, desire to be released; for this is tantamount to real incompatibility.

CHAPTER VIII

THE SOCIOLOGICAL SIGNIFICANCE OF COMMON SENSE

HITHERTO I have discussed common sense exclusively as it may belong to the typical individual, and what has been called social common sense is that common sense which the individual exercises in his social relations and pragmatistical utterances. But common sense consists essentially in cognitions and conscious actions of sorts which are common, though not in identical forms and degrees, to all normal individuals. These normal individuals are not isolated beings, but are members of families, of local communities, and of nations. Some part of the individual's common-sense knowledge will therefore be such as is specially shared by members of his own family; some, such as is shared by his fellow townsmen; some, such as is shared by his fellow countrymen. There are, however, certain universal elements of common-sense knowledge, such as the practical conceptions of time, space, corporeal objectivity, and personal freedom of choice, which are common to all normal human beings without exception. There are also certain more specific elements which are common to all who have reached the stage of civilization now manifested in Europe and the European colonies and among those Asiatics who have adopted Western customs and appliances. It is, in fact, the common sense of the average civilized individual which I have been discussing under

the heads of physical and social common sense, and it is this *civilized common sense* which I now propose to allude to in its collective aspect.

Despite their differences of individual endowment, moral and mental, there is a considerable degree of uniformity in the common sense of all civilized persons, due to the general similarity in their material surroundings and social customs. Their common sense is of a different order from that of savages or of semi-civilized nations whose ideas are dominated by belief in supernatural agencies and subservience to kingly and priestly authority. Of course the savage possesses common sense of a sort, but it is probably as much below the common sense of the civilized artisan as the language and discursive culture of the savage are below those of the educated Anglo-Saxon, Frenchman, German, or Italian. The difference, in the case of physical common sense, is largely due to the difference in the arts of life—in clothing, housing, furnishing; in the variety of commodities, implements, and utensils which the savage does not know, but the civilized man does know, how to use; in the many marvellous creations and appliances of physical science which, to the civilized man, but not to the savage, are at least outwardly familiar and recognized as having been produced through human art utilizing natural materials and conditions. In the case of social common sense, the difference between the savage and the civilized man depends largely upon the corresponding variety and complexity of social conditions in civilized life. In neither case, however, is the difference between savage and civilized common sense due simply to increased complexity of environment. Two practically new and vitally important principles are involved in the transition. The increase in physical common sense is marked by an implicit recognition of natural causation and of man's

ability to utilize his knowledge of nature, by bringing about conjunctions of material objects and circumstances favourable to his purposes, or by taking rational steps to avoid what would otherwise be natural calamities. Thus the *idea of nature* is implied in the higher form of physical common sense, and what is equally implied in the higher form of social common sense is *the ideal of liberty*.

Fundamentally, liberty means scope for the will of the individual, who repudiates what he takes to be arbitrary restraint or constraint on the part of other individuals; but the *ideal* of liberty involves the *sharing* of liberty under just laws which protect the liberties of the weak against the license of the strong. Liberty to injure others or "take the law into one's own hand" is no part of this ideal, and such liberty the civilized man renounces; but he retains to the full the liberty to agitate for the repeal of what he considers to be unjust laws, and for the enactment of new laws which shall tend to social betterment. For this purpose he may have to associate himself with this or that political party or sectional association, such as a trade union or guild; since, otherwise, he is a mere unit among millions, helpless to promote the reforms for which his sense of justice cries out. He may, therefore, have to sacrifice some of his individual liberty to the collective will of his group, as well as some to the collective will of his country; but, unless his group is in open rebellion against a Government which cannot be influenced by constitutional means, he will place the claims of the State above those of the particular group to which he belongs.

There are *collective liberties*, both of the State among States and of the party among parties in the State. Patriotism emphasizes the former and deprecates the

latter ; while radicalism and rationalism elevate the claims of party, not with a sectarian motive, but on the view that only far-seeing and determined minorities can initiate those changes, in the direction of true progress, which are opposed by the innate conservatism of "classes " and " masses " alike. That the liberty of the State among States should be conditioned by international law, just as the liberty of the individual among individuals is conditioned by national law, is a maxim which has not hitherto been generally accepted, but which, it may be hoped, has now become a common judgment of civilized mankind ; a judgment judged in the lurid light of the abominations of 1914-1918.

As was said before, the fundamental sense of " liberty " is liberty for the individual.

The civilized man respects many particular laws and recognizes many particular proprieties which are not imposed on the savage, but the general effect of civilized law and custom is to ensure a wide scope for individual initiative ; in deed and in word ; in political, religious, philanthropic, and philosophic propaganda ; in science, in art, and in recreation. The indispensable condition of this scope for initiative is the privilege of being, to a large extent, let alone, or left to one's own devices - not being obliged to follow an external lead, as in the case of the herd and the tribe. The opportunity to make the best of ourselves in our *own* way, which is also necessarily an opportunity for defying many prevailing opinions and sentiments, good as well as bad, and no less necessarily an occasion for indolence and selfishness to claim their natural victims, is what the civilized world understands by liberty. To say that it is liberation from the trammels of tribal obligation, and power to do what we like, provided we do not curtail the equal liberty of others, is an extreme view, characteristic of the *laissez faire*

philosophy. There must, however, be a wide scope for individual choice, within the bounds set by civic regimentation, if liberty is to have any meaning for the individual. The liberty of his nation to govern itself or its liberation from real or supposed bondage to some superior Power may, of course, appeal to him as a patriot; but if, at the same time, his national Government is to dictate all his personal actions, he has no personal liberty.

Practical liberty is possessed in the highest degree by persons of independent means; though whether there should be persons who, from youth upwards, possess this fullest liberty without any corresponding definite duty to the State, and whether the men whose business energies, aided by legacies or good luck, enable them to build up great private fortunes are peculiarly necessary to the life of a progressive community, are of course questions apart. For the ordinary worker or salaried official without an independent income there is nominal, but usually not much practical, liberty to choose or change his "berth," and there may be the pensioned liberty of old age; but what for him chiefly stands for liberty is that amount of leisure which is strictly at his own disposal. For the sweated worker and for persons engaged in any severe struggle for employment, it would seem that liberty can be little more than a name; yet few people would barter even such nominal freedom for an assured competence under nominal slavery. In fact, it seems to be generally understood that liberty, however liable to be abused, and however practically restricted among the non-moneyed classes, is an essential condition of true human happiness. The extension of the franchise is, of course, one sign of liberty; but the substance of liberty is something much more important, at least for those who entertain the essentially civilized ideal of life,

in which individual freedom and civic duty strive to find their just equilibrium.

In civilized common sense *the idea of nature*, as before alluded to, is no less important than the ideal of liberty. The belief in supernatural agencies, at least in those supernatural agencies which are looked upon as liable to interfere with the course of events and as amenable to human influence, whether of magic, of sacrifice, or of prayer, has been the greatest bar to the progress of physical science and its consequent applications to human needs. But not only so. Supernaturalism has also tended to stultify and pervert physical common sense, and has probably caused a great number of positive hallucinations; while its effect on social common sense has been so destructive as to create, in certain places and periods, what may be truly called collective insanity. It has fostered an attitude of abject submission to medicine-men and priests, with a correlative frenzied suspicion of witchcraft and heresy, leading to endless persecutions, no less ridiculous from the point of view of sane judgment than abominable from that of true justice and impossible from that of true humanity.

Common sense, as such, does not involve any dogmatic denial of supernatural causes, but, its interest being centred in natural causes, and particularly in climatic conditions and material objects, including animals and human beings, as the only natural causes familiarly known, it tends to become indifferent, if not hostile, to theological and spiritualistic beliefs. This is the fact practically recognized by W. E. H. Lecky in his *Rise and Influence of the Spirit of Rationalism in Europe*, though he may not explicitly identify the spirit in question with what I have called civilized common sense. His leading idea is that men were not convinced by evidence and argument of the imaginary character

of certain supposed occurrences, especially the reputed practices of witchcraft, but that various causes involved in the general progress of civilization contributed to make these suppositions absurd in the eyes of persons who could give no adequate reason for rejecting what their fathers had fervently accepted. While I am disposed to think that Lecky underrates the direct influence of advancing freethought and what has been well called "the warfare of science with theology," his view seems to me to contain a large measure of truth. It does so because the general advance in civilization which, among certain cultivated minds, re-created the philosophical conception of naturalism as opposed to supernaturalism, also involved a great access of physical and social common sense among the semi-educated classes which constitute the most effective part of a modern democracy.

That this attitude of civilized common sense was and is morally and logically justified may be disputed from certain theological and theosophical points of view, but the hopeful considerations from a Positivist or Humanist or Rationalist outlook are, that it has come to stay ; that it is being constantly strengthened by the progress of science, pure and applied ; that it accords with a true philosophy of experience. It is making for progress ; ultimately for established peace among the nations, and for common sense of a still more socialized and cosmopolitan order. Men will at last recognize themselves to be living atoms in what Comte called the Great Being of Humanity ; each living atom being a microcosm, in proportion as its mind reflects the culture of its own and previous ages, and a creative force of human well-being, in proportion as its will pursues true utilities and ideals. Comte's conception may still seem somewhat chimerical, and in various extraneous respects it may be chimerical ;

but it is based on a true recognition of tendencies which make, through all conflicts of interest, creed, and sentiment, for an effective reciprocity of human beings in a well-ordered community of nations.

That is a superficial view of the real world—a view dominated, it may be, by other-worldly considerations ; it may be, by the prejudiced conservatism which clings to monarchical and aristocratic ideals and dreads the advance of democracy, or, it may be, by narrow, impracticable, and often grotesque notions of human perfection—which causes some men to despair of humanity. It is true that the civilized world is permeated with the conflict of incompatible creeds, theories, and ideals, including the rival aspirations of nations still heavily armed, despite that peace-promising League which revulsion from the horrors of the recent Great War has created, and also including the rival claims of antagonistic classes and sections in each community. At a hasty glance it might seem natural to infer that a world so divided against itself is in process of disintegration. But, in fact, mankind is not so mad as it seems ; civilized human beings are not so irreconcilably opposed as are their abstract theories. In the possession of social common sense they participate each in a common human nature, which is not ideally good or altruistic, but which affords a certain bond of sympathy even between rival partisans and claimants, and at the same time tends to the spirit of compromise in practical affairs. Let all think for themselves and express their thoughts with the utmost freedom ; still, if there be a fair measure of social common sense among them, as there doubtless is in the majority of civilized men and women, they will not refuse to live under laws which they hope to repeal, or to practically tolerate in others beliefs and customs which they personally disapprove, and, it may be, properly protest

against; they will not readily come to blows for the sake of a "cause," and, if the peace is broken, they (or those of them who survive) will not be very long in seeking to re-establish relations of tolerable harmony. And, ultimately, a harmony will be established which, if not ideal, will be much better than "tolerable," and will not, for one thing, permit of the hitherto *intolerable* waste of the products of human science and human labour in maintaining huge standing armies and navies for the defence of national interests which do not seriously, or so far as the great majority in each nation is concerned, conflict, and which could in any case be far better defended through an established system of international law.

CHAPTER IX

COMMON SENSE AND PHILOSOPHY OF KNOWLEDGE

1. *The Claims of Culture and Philosophy.*

THE great social value which civilized common sense undoubtedly possesses cannot be enhanced, or, rather, must be impaired, by any attempt to treat it as a substitute for the scientific and general culture of discursive intellect, which is its natural and historical concomitant. When the assumption of possessing much common sense, or the kindred claim of being extremely "practical," is made an excuse for refusing to study and reflect, for contemning the abstract truths and speculations of science, for belittling learning and discussion at large, the dominant trait in the person's character is not common sense, as such, but a hollow form of self-satisfaction, which may, I think, be described as sordid sense. This sordid sense is, unfortunately, a very common failing; especially, perhaps, among English people. Owing to the poverty of our educational ideals, which, in its turn, is largely due to the dead hand of theology resisting the necessary re-organization of instruction on a philosophical and naturalistic basis, it is widely supposed that learning ceases to be a duty when we leave school. It is thought that, from that period onward, our one great endeavour, if we are not capitalists, must be to make money, or at least to earn a satisfactory livelihood, and

probably support a family ; the one necessary relief from work at high pressure being recreation, in the shape of sport, shows, games, music, or anything else which does not seriously tax the brain, but tends, as we say, to relax it. So far as reading and reflection are concerned, there are multitudes who are content to imbibe such discursive ideas and opinions as they may find from their daily or weekly newspaper, and think that they have no time for solid literature. Some, who do read books, cannot get beyond the lightest of novels. Many people, especially women, regard attendance at the weekly sermon as a pious and sufficient substitute for thinking seriously about things in general. Of course, where the stress of earning a livelihood or rearing a family is severe, there is much excuse for this reluctance to study and inquire. It cannot be branded as *sordid sense*, except in those who pride themselves on it and boast of having no use for ideas that do not help their petty personal ends. There are many others (the present writer is one of them) who go through life with an uneasy consciousness that there is much which they ought to know, but cannot find time for learning ; and it is probable that those who are familiar with this prick of the intellectual conscience do learn continually, though not so much as they might. Human nature is, in fact, atrophied, when the mind ceases to learn, or refuses to claim an increasing share in the great immaterial human heritage of knowledge, speculation, ethical culture, and imaginative art. Our highest aims must always be spiritual—at least, in the sense of exalting truth and far-seeing goodwill into supreme objects of life ; and we must generally recognize the fact that neither of these possessions comes to us ready made, but only as the result of prolonged striving in one or other of the interlinking spheres of mind and character. Our personal attainments, intellectual and

moral, will not be proportionate to the amount of discursive learning with which our common-sense knowledge and hereditary disposition are overlaid; but, none the less, our essential humanity is bound up with some superstructure of discursive knowledge as personally assimilated.

A serious difficulty here presents itself. This lies in the vastness of literature, the huge accumulation of formulated knowledge under the head of each special science or branch of historical research, and the great diversity of ideals which seek to apply real or reputed knowledge to the needs of individual and social life. While common-sense knowledge becomes organized through an intuitive process of reflection on experience, no such intuitive process is possible in the case of discursive knowledge, except in the sense that some few individual thinkers possess what may be called a philosophical genius, tending to systematize the totality of ideas and seize the essential meanings of things. *Some* philosophy is necessary for every human being who would preserve the capacity to learn, and acquire the ability to select from the multifarious subjects and sources of knowledge and speculation as much as he can personally assimilate; and those who are not original thinkers must naturally look for guidance to some of those who are. Philosophy is often wrongly represented as a tissue of fanciful speculations having no useful bearings on life; and the serious disagreements between different schools and systems prevent the superficial student from recognizing that, despite much pedantry and verbal jugglery, all philosophical thinkers have a common aim in describing and, so far as possible, explaining the facts of universal human experience, and that they deal, by different methods, with what remains essentially the same body of fundamental ideas. Philo-

sophy is necessary to supplement the special sciences and criticisms, by forming a conspectus of the many-sided experience from which each special study abstracts only such particular perceptions and notions as concern it. Even if philosophy had not this function of its own, it would still be necessary to afford that synoptical view of scientific progress and prospects which no special science can, in the nature of the case, undertake.

2. *The Philosophy of Science.*

There are many people who disparage philosophy in comparison with what they are pleased to call "science," when all the time their own standpoint is not that of any science, but that of a philosophy which puts its faith in the methods of science, especially in those of the physical sciences, and which seeks to estimate the collective effect of these sciences on human knowledge and their collective value to human civilization, contrasting this with the barren character of metaphysical speculation. In fact, no individual scientist, and still less any individual thinker who is not a scientist, has a right to speak in the name of science; for science is essentially characterized by the agreement of expert investigators in each department, and it cannot be dogmatically determined by a given person at a given period exactly how far this agreement extends. An expert will know approximately what is agreed in his own science, but no man has that intimate knowledge of all sciences which would entitle him to speak in the name of science as a whole. Thus that familiar type of thought which extols science is essentially not science, but a particular phase of philosophy, as would no doubt be recognized by its more cultured and serious exponents. When so recognized, we may term it philosophy of science. That philosophy of science is compatible with

wide diversity of speculation may be seen from comparing the various systems which have sought to formulate the methods of science in opposition to those of metaphysics; such as the systems of Comte, Mill, and Spencer respectively. In general it would appear that the philosophy of science has been too eager to lay down the laws and define the possibilities of knowledge, while the particular science which has the most essential bearing on these subjects—the science of psychology—is still at a very imperfectly developed stage.

3. *The Pragmatical Reaction.*

The movement known as Pragmatism, with which the more speculative philosophies of Bergson and Eucken seem to have certain affinities, consists in the opposing of a particular type or types of psychology both to the older order of metaphysical speculation and the newer order of confidence in the logic of material facts. No doubt Pragmatism has seized some important aspects of truth; but, in asserting the subjectivity and idiosyncrasy of experience and making light of formal logic, it seems to have forgotten that scientific as opposed to common-sense knowledge is necessarily based on general ideas approximately fixed by defined terms, and also on the mutual understanding of these terms by all people who use them correctly. Formal logic is, or should be, an instrument for securing this mutual understanding, and for consistently setting forth those judgments which are obscurely implied in the meanings of various ill-defined terms familiar to philosophical thinkers, and, indeed, to all who think at all in the cultural sense. Despite much which may be idiosyncratic in the experience of each individual, there is a superabundance of experience—of familiar sensations, memories, imaginations, pains, pleasures, desires, purposes, conscious

actions, questionings, methods of judging and reasoning—which there is good reason to regard as common to all adult and civilized human beings. In this mass of common experience there are many fundamental uniformities of quality and relation, which no one questions if they are properly described. The difficulty is to describe them properly. There is no uncertainty as to their occurrence; but it requires trained habits of concentrated thought to find and consistently apply appropriate terms, whereby the tacit assurance that such and such experience takes place can be translated into a clear reflective knowledge that it does. And if a thinker should succeed in analysing this common experience to his own satisfaction, his use of terms may not be such as to appeal readily to the thinking public at large. It may or may not be such as will eventually appeal to that public. If it is true and adequate, it will probably win its way by degrees; but the thinking public, which is now accustomed to use psychological and philosophical expressions in a most shipshod manner, will need much educating up to it.

The philosophy to which the present critique of common sense points will be allied to philosophy of science and opposed to Pragmatism in asserting, firstly, that the sphere of legitimate speculation cannot be determined by the needs of practical life, and, secondly, that speculative truth, or correspondence of statements to real and relatively objective distinctions and relations of things, facts, or values, is not only possible, but is a necessary implication of discursive knowledge.

4. *The Speculative Motive.*

In regard to the relation of practice to speculation, there would be no practice in the proper sense of the term, if it were not for speculative cognition, which

shows us, at every moment of pause and reflection, possibilities of action other than those finally adopted. In this sense, the speculation which concerns itself with practice is always wider than practice. But speculation is not merely the condition of practice ; it is the partial revelation of nature. The applications of science bring all sorts of previously unsuspected possibilities of action into life ; but these applications are dependent on the progress of pure inquiry,¹ and the object of pure inquiry is to know things in the discursive-cultural sense of knowledge, in which sense the things known have no necessary relation to human practice of the pragmatistical sort. They have of course a necessary relation to practice, in so far as the knowledge of them is based on deliberate experiments undertaken for the purpose of ascertaining facts, and also in so far as practice may be supposed to include the whole methodical (contemplative and perceptual) activity of science. The essence of this activity, however, is its impersonal objectivity ; its determination to be true to facts which cannot be altered by human feelings and volitions ; though it does not by any means follow that feelings and volitions may not help to determine many particular future facts, in our own lives and in the life of the human community.



5. *The Object-Matter of Thought and Science.*

In regard to the relation of truth to reality, the foregoing interpretation of common sense assumes a certain approximation of the mental image to its material object ; the object is looked upon as real, the image as corre-

¹ This is true in the present stage of human knowledge. At the same time it is probable, as Ostwald maintains, that the original stimulus to the growth of pure science lay in the arts of life ; chemistry, for instance, being derived from various practical sources, such as primitive medicine, metallurgy, dyeing, glazing, etc.

latively true. This duomodality, or differential but complementary relation, of image to object, is the fundamental type of a more general duomodality between what is subjective and what is correlatively objective, which subject-object relation reappears in various forms. In discursive reasoning it appears as the inferred correspondence between the subjective idea, marked by the presence in consciousness of an understood name or description, and the *object-matter* of which we have an idea, or about which we form a set of judgments. Such object-matter may be imaginary, or it may be real in an abstract sense only or in a mental sense only. Among legitimate object-matters of inquiry we must of course count the facts of subjective experience, including ideas and thoughts themselves. It is only as we reflect upon past thoughts, and thus make them object-matters, that we know them as thoughts; their primary function being to know object-matters which are not thoughts. Among these other object-matters are our own sensations, emotions, and volitions; it is only as we think about these that we know them in the discursive sense of knowledge. The general relation between idea and object-matter may be illustrated by the fact that each science or department of science, considered as a subjective system of ideas and judgments, refers to some object-matter different from and of far greater extent than itself. This is very obvious in the case of such sciences as astronomy, geography, and chemistry; but where it is least obvious, as in logic, the law holds equally good. The substance of logic is contained in a comparatively few books and lectures, and a correspondingly small proportion of our silent cogitations—namely, those which we engage in when studying logic. On the other hand, the object-matter of logic—the fact of reasoning either correctly or otherwise—enters into

all books, all spoken discourses, all connected thoughts. The object-matter of logic being thus altogether greater than its substance as a science, it is clear that the object-matter of psychology, which includes not only reasoning but consciousness in all its modes, is still more incommensurable with the substance of psychology as a science; for this substance is of course precisely as intellectual as that of logic or of any other science, as such. Since the sciences of logic and psychology must thus envisage object-matters lying beyond their own subjective bounds, there is no reason why the physical sciences should not envisage object-matters still more remote from their own status as sciences. If then we assume that a science is a genuine science, or that the bulk of its judgments are true, we thereby also assume that it has an object-matter which is correlatively real, but which may or may not be real in the concrete or in the physical sense of reality.

6. *The Sphere of Descriptive Knowledge.*

Objects inferred to be real in both the latter senses form the object-matters of the mental images of common sense, as well as the fundamental object-matters of the physical sciences. The vague and largely potential sort of truth contained in a mental image may be discursively expressed, not by any single proposition, but by an indefinite series of propositions describing the object—that is to say, naming the object by their common subject-term, and joining to this subject-term various distinct predicates in succession. Such predicates must, of course, be logically consistent with one another, but they are not, as a rule, logically deducible from one another; being derived from direct observation of particular objects in which various qualities and relations are co-present. That they are so is a fact immediately

vouched for in so far as some characters, such as visible shape, magnitude, and colour, are concerned, and which is also judged from the consecutive observing of what is clearly an identical object under different visible aspects or by means of different sense-organs. If our descriptive judgments apply, not to an individual object, but to some familiar species, it is quite possible that some one or more of them may be erroneous and that we may still have a substantially correct knowledge of the species ; but the truest and fullest description must fail to exhaust the nature of any real object or specific class of objects. In fact, description does not touch the nature of objects other than symbolically. The separateness of the judgments involved in a given description proves this point ; for, though certain thinkers may at times confuse mental images with their objects, it is not possible to confuse a set of verbal statements with a concrete object whose various qualities obviously co-exist, and do not succeed one another as the statements do.

While the only properly concrete object-matters are material things or groups (including persons and social groups), it is necessary to take note, for the descriptive purposes of abstract science, of certain really abstract but quasi-concrete object-matters. They are subjects about each of which a good many different qualities and relations may be predicated, and so must be termed *substantive*, in contrast to those properly *attributive*, object-matters, which have an elementary simplicity and do not appear capable of further analysis. Among these quasi-concretes may be mentioned terms and propositions in logic ; numbers, in arithmetic ; figures, in geometry ; mass, motion, heat, light, electricity, sound, etc., in physics ; words and grammatical constructions, in philology ; books, pictures, sculptures, and musical compositions, in the history of culture ; institutions, laws,

and customs, in sociology ; the moral law, with good or bad and wise or foolish traits of character, in ethics. Such, also, as I hold, are personality, mind, and character, in the individual ; and such is experience itself, with its general modes and particular process-contents, as viewed in psychological analysis.

• 7. *The Sphere of Philosophy.*

Now, in all the above abstract branches of knowledge, as well as in the properly concrete sciences, such as astronomy and botany, the elementary sort of knowledge which is simply descriptive cannot become clear and convincing induction or deduction except as certain substantive object-matters are found to have definite relations to one another. Relations, as such, are, it appears to me, the peculiar object-matters of philosophy ; which, by this fact, is brought into contact with all the other branches of knowledge, in each of which many special sorts of relation are discussed, while the more universal sorts are implied. It is, of course, with these latter, which the special sciences do not specially discuss, that philosophy is primarily concerned. It is concerned with the relations of truth to reality ; of thought to the totality of experience ; of perceptual experience, common sense, and discursive reason, to the physical world and the knowable universe.

There are right and wrong relations between human beings as well as between ideas, and it is always an aim of philosophy to pursue true values in life, and, so far as possible, to prescribe right and wise conduct for the individual and the community. But philosophy recognizes the fundamental value of reasoned truth, and that, just as it is necessary to know physical nature in order to control it, so it is necessary to know the nature of man, physical, intellectual, and moral, personal and

social, in order to improve it. And the first question of all is: What is meant by *knowing*?

The whole philosophy of knowledge has, in my view, two great divisions: methodological and epistemological. In methodology, which may be described as logic brought to bear on the other sciences, the thinker envisages relations which appear in the general object-matter of knowledge, such as the relations between the concrete and the abstract and between the singular and universal, discussed in Chapters IV and V of this work, or certain other relations which appear in logical classifications. In epistemology, which may be described as psychology brought to bear on the other sciences, he considers experience as the ultimate source of knowledge and valid judgment. He seeks to apportion the correlative values of reason and sense-perception, as factors of experience contributing to our knowledge of the physical world; if not also those of reason and feeling (or affective experience) as factors contributing to the knowledge of our human selves.

In the general study of relations it is important to note that rational distinction, or logical negation, is the implied basis of relation, as such. The copula of an affirmative proposition does not express relation, but identity up to a certain (usually undefined) point. The logical forms, "A is B," "some A is B," "all A is B," are all alike compatible with the case in which there is no relation between A and B, since these are merely two names for one and the same object-matter. "Some A is B" is also compatible with three totally different relations in which A and B may stand to one another. "All A is B" is compatible with one relation, and usually implies it, but does not logically imply it until we add the particular negative, that "some B is not A." The relation expressed by these two formal statements taken

together is more naturally expressed by saying (according to circumstances) that "A is a member of the class B," or that "A is a species of the genus B," or that "A has B" (as a property common to it and other things).

As distinction is the basis of positive methodological relations, so is it the basis of the positive epistemological relations between idea or judgment and object-matter or object-matters in relation. The idea is not the object-matter. The judgment which states a definite relation between object-matters is not the relation itself. Both idea and judgment are mental substitutes, which assist in the knowing of reality by the individual mind, according to their interconnectedness with other true ideas and judgments with which that mind is furnished.

8. *Methodology : Relations of Sort and of Fact.*

Relations of greater or less likeness between many different object-matters (whether objects or events or conditions in the world or process-contents of consciousness) have come to be mentally subsumed under identities of sort, each signified by some general name, concrete or quasi-concrete or properly attributive. These identities of sort, or logical essences (variously called essences, concepts, contents, and—by Plato and some others—ideas), have a conventional unity of their own, and the abstract sciences, together with such concrete sciences as chemistry and biology, are occupied in comparing sorts which can be at least approximately defined, instead of comparing things whose identity can be determined only in conjunction with data of time and place. Of course the chemist deals with individual samples of this or that substance, and the biologist with individual specimens of this or that species; but they are dealt with as samples and as specimens respectively, not (or not as a rule) as objects individually interesting.

The general form of relations of sort is given in the typical definition. If we say that "A is a B having the quality C," we allege the absolute identity of "A" and "B having the quality C," but we at the same time express three distinct relations: first, that A is a species of the genus B; second, that C is a quality of the species A; third, that C distinguishes A from the rest of B. Extensively speaking, all the object-matters called A are identical with some, but not with all, of those which are called B. Intensively speaking, all the qualities connoted by B belong to each A, which has the quality C in addition.

Relations of sort are, in the real universe, grounded on relations of fact. Things and events which are undistinguishable in character may be perfectly distinct through the fact that they occur in different places or at different times; and those which are distinguished in character are more fundamentally distinguished through their respective *loci*. Degrees of proximity in time or in space and directions in space are factual relations between existent things; while the relation of whole to part, manifested in respective periods of time or respective quantities of space, taken in one, two, or three dimensions, or, more pertinently, in the relation of structural parts to a whole mechanism or organs to a living organism or lesser to greater and containing social groups, are factual relations having a clear parallelism to, but not to be confused with, the classific relations of instance to class and species to genus. Relations of cause to effect, or sum of conditions to particular being, or of reciprocal conditioning, are of course inseparable from the factual relations of time and place, though it is sought to bring these under general formulæ, called laws of nature, which, as such, are relations of sort.

It should be noted that all relations of fact involve

general *modes* of being related, such as being before or after, above or under, near or remote, containing or being contained, causing or being caused, etc. They are therefore sorts of relation, though not relations of sort. That which constitutes them relations in fact is not any of these general characters which they possess, but the actual being *here* or *there*, *now* or *then*. They are not merely relations in time, considered as duration, or in space, considered as extension; they occur in the unique process of historical or pre-historical time, and in particular places which are or might be determined geographically or astronomically.

Thus the logical hierarchy of concrete and quasi-concrete classes and abstract modes (qualities and relations) needs to be based on the ever-changing historical order of things, as they occur on the earth's surface or in cosmic space. Here the particular instances in which all genera and species ultimately consist are not symmetrically grouped, as on the shelves of a museum or in the mind of a thinker, but are distributed with extreme irregularity. Nevertheless factual and classific relations unite in the individual object, which, as regards the former, is a congeries of its own material parts and a nucleus of factual relations to surrounding and pre-existing things; while, as regards the latter, it is an instance of the proximate species and all the ascending genera to which it belongs, and a concrete unity of its own abstract characters.

9. *Epistemology : Relations In and Of Experience.*

According to the view which I entertain, and which might perhaps be labelled *referential realism*, or simply *relational realism*, it is the normal and appropriate function of thought (both as common sense and as rational discourse) to make truthful reference to object-

matters which do not share its own ideational or intellectual character. While *it* is *other-significant* (partly representative and partly symbolical), *they* are *self-significant*. Now, "self-significant" may perhaps suggest something being in itself immediately intelligible, but that is a sense very different from what is here meant. Possibly relations of the more abstract orders may be regarded as immediately intelligible (I do not commit myself on this point), but certainly no real or really related things or occurrences are so. An object-matter is self-significant, on the understanding that it has a *locus* and a nature of its own to be ascertained and conformed to by thought. It becomes intelligible only by degrees, through increments of experience and of systematic thinking.

While the material objects referred to by common sense and the concrete sciences belong evidently to the self-significant order, so also do those facts of subjective experience which are not merely thoughts. Granting that thought, when, as present thinking, it actually occurs to the individual, is a part of experience, it is certainly not the whole of experience. The other facts of immediate consciousness may be termed *spontaneous experience*. There is a fundamental sort of spontaneous experience, consisting in sense-perceptions, which may be followed or accompanied or preceded by instinctive cravings or impulses. This experience is not at all dependent upon thought, and may be called *primary* spontaneous experience. There is another sort of spontaneous experience, which is dependent upon thought, in so far as particular thoughts appeal differently to different people, creating the order of properly human (both good and evil) sentiments and conscious motives. This may be termed *secondary* spontaneous experience.

The relation of thought to spontaneous experience

is a relation *in* experience. We remember that we perceived or felt or willed so-and-so, or we may be intellectually aware of our present feelings—for instance, thinking to ourselves “I feel cold” or “I am vexed.” Whether the thought be memory or reflection upon what is present, the self-significance of the spontaneous experience is marked by its greater intensity in comparison with the correlative ideas—*e.g.*, by the greater vividness or definiteness of actual sense-perceptions, the greater poignancy of realized emotions and sentiments, the greater urgency of those volitions which are, not thoughts about acting, but actions begun.

The chief question with which epistemology is faced is the following: How can the relations *in* experience, between different sense-perceptions, between different ideas, and between sense-perceptions and ideas respectively, explain the relation *of* experience, as subjective and personal realization, or life in the intimately autobiographical sense, to the world of objective persons and things? No detailed or adequate answer can be here attempted, but I suggest that the relation *of* experience to physical reality is properly viewed as a relation *of* thought, *through* sense-perception, to physical reality. It begins with that relation of mental imagery to material objects (including the self-body) outlined in Chapter III.

Consciousness of the body, though it does not at all times claim our attention, is a constant awareness accompanying each spell of waking life. It has the internal aspect due to the fact of breathing, and the external aspect due to the fact that, in all our postures and all our actions, we can feel that some part of the body is in contact with some external support (earth, floor, bed, chair, seat of a conveyance, etc.). Now, the fact that we feel with all external parts of the body when

they come in contact with other bodies of a tangible character compels us to form an indefeasible, if somewhat vague, image of the body as an extended object; and it is equally natural that we should acquire a knowledge of the locality (in the head) of our special sense-organs through the fact of using them.

The close association of experience in its various modes with certain tracts of the brain and nervous system is a scientific induction which I accept as such, but not as a datum on which philosophy of knowledge can be founded. We who are not physiological experts know next to nothing about any brains or nervous systems except what the physiological experts have told us. And we who are thinkers want to know how the whole assumed physical order, to which body, brain, and nerves belong, is validated by evidence derived from actual sense-data of sorts accessible to every normal human being.

Certainly every sane adult, no matter how ignorant he may be of the physiology of the nervous system, connects his tactual and kinæsthetic sensations with particular parts of his body, and his specialized sense-perceptions with their respective special sense-organs. While we have direct tactual and indirect visual (looking-glass) evidence as to the positions of our own eyes, ears, and nose, in the head, the position of these organs is also learnt in connection with their special functioning. This special functioning begins to be understood through the fact that it can be deliberately interfered with. That we see by the eyes, hear by the ears, and smell by the nose, are judgments convincingly proved by the simple methods of shutting and re-opening the eyes, stopping and unstopping the ears, closing and then sniffing with the nostrils. Thus, while the association of all consciousness with the brain is an abstruse,

though, I believe, a true, psycho-physiological induction, the association of sense-perception with an extended body and sense-organs is judged by every individual from his own repeated experiences. We cannot clearly remember having touched or seen or heard anything without also remembering that our own unique bodies or eyes or ears were concerned in the fact.

The two senses which have an especially direct reference to objective reality are touch (which includes the consciousness of being touched, struck, or pushed, the consciousness of being in contact, and the kinæsthetic experience of touching things in the course of our own actions) and sight.

The tactual sensations of heat and cold and the visual sensations of light and darkness most certainly refer to the physical conditions of heat and light, as present in relatively high or low degree. The duality of the respective sensations is no doubt subjective, yet it is due to a relation between the objective self and the objective environment. What we touch feels cold if its heat is much less than that of our hand, and especially if, at the same time, it is a good conductor of heat. Darkness appears as a diffused greyiness, tending to blackness; but it is obviously connected with the experienced difficulty of seeing things distinctly, which difficulty is in turn connected with the absence of the sun and of any other physical source of illumination.

It is, however, in referring to material objects of tangible and visible dimensions that touch and sight give us our fundamental knowledge of the physical world. Moreover, the two senses co-operate in giving us this knowledge. They are frequently co-directed upon the same things, and visual appearances have a definitely ascertainable relation to tangible forms—a relation fully formulated by the science of optics. But even when we

touch without seeing or see without touching, the sense of objectivity is unmistakable. We at least believe that we perceive, not merely sense-data as such, but things themselves through the immediate sense-data. I hold that this common-sense judgment is quite correct if we qualify it by admitting that we do not simultaneously perceive either the inner structures or the whole natures which we properly conceive the perceived things to have. We do touch a thing if we touch some part or parts of its surface. We do see a thing when we see some one of the many possible aspects which it presents from different points of view. In either case we are convinced that the thing is *there*—locally distinct from, though locally related to, our own hands or our own eyes. And, barring certain rare cases of illusion, the thing *is* there. It is not *in* our experience, but is something to which our experience consciously relates itself.

CHAPTER X

COMMON SENSE AND PHILOSOPHY OF CAUSATION

1. *The Problems of Psychological Causation and Free Will.*

IN Chapter III, when discussing the distinction between mental image and material object, I dwelt chiefly on the stable, definitely extended, and concrete character of the object, as existing in a given place or series of places; comparing this with the growingly definite but always incomplete and symbolic character of the image, which nevertheless forms the psychic basis of the judgments whereby we attribute to the object qualities correlatively real and opposed to those of the image, as such. In Chapter V (pp. 30-31) this general distinction between image and object was supplemented by noting their differences in point of occurrence and relative permanence in objective time. In Chapter IX (p. 70) I showed that the image, as analysed by discursive intellect, becomes an extended description in which various predicates, used in succession, stand for the qualities and relations which concretely co-subsist in the object. It now remains to consider what is perhaps the most salient of all distinctions between image and object—the distinction in respect of causation. The causal action of material objects as such is action in accordance with their primary or mechanical properties (see Chapter IV, pp. 23-24). The mental image, being only a subjective idea, has no primary properties. It is certainly not a

mechanical cause, and hence many thinkers deny that it is a cause at all; regarding it as a mere *epiphenomenon*, which accompanies certain physico-chemical changes in the substance of the brain; these giving rise, through the efferent nerves and the muscles, to what appear to be our voluntary actions. Now I have pointed out (Chapters III, p. 20, and IX, p. 78) that simple common sense knows nothing of the machinery of the nervous and muscular systems, or of brain and body physiologically considered; and it does seem to common sense that our desires, fears, and rational decisions are true causes of our bodily actions. But mental images and the judgments relating to them are the cognitive elements of consciousness which immediately excite desire or fear and give material for the exercise of pragmatistical volition (*cf.* Chapter VII, pp. 44-47). Thus common sense has a twofold bearing, if not two opposed bearings, on the philosophy of causation. In postulating the reality of material objects and the correlative unreality (*i.e.*, physical unreality) of mental images it seems to be making for materialism, and its acceptance of primary properties as fundamental seems to furnish a basis for mechanistic determinism. On the other hand, in recognizing that we act voluntarily, partly because we have mental representations of surrounding objects and ourselves, and partly because we have natural inclinations or rational resolves to seek or shun certain things, do or avoid certain deeds, common sense seems to make for a philosophical position which is either dualistic, postulating a separable soul as acting through the body, or duomodal and idealistic, maintaining that the attainment of conscious purpose is the end of life, and that such purpose cannot be expressed in terms of pure mechanism.

In Chapter II (p. 9) I referred briefly to personality

as a something not included in the actual flux of conscious states, but involving permanent tendencies to act and think in particular ways; which tendencies form two related groups, known as character and mind respectively. The fundamental question for psychology is whether this personality, or "soul" in a non-committal sense, has any individual existence apart from the human organism, or whether the permanence of its various tendencies is simply due to the permanence of certain centres or paths or areas of nervous energy, subsisting in the organic unity of the cerebral substance. To accept the latter alternative for explaining the psychic unity of personality is to reject dualism, with its craving for personal immortality, in favour of a form of monism; but such monism does not necessarily involve mechanistic determinism. The fullest admission of a physiological basis of consciousness does nothing to explain the modes of consciousness as subjectively known, and it is probable that the physiological conditions themselves would not be what they are, were it not for the special character possessed by the concomitant states of consciousness. The relation of consciousness to neural function would thus be parallel to the relation of form to substance in a solid material body; the form being nothing apart from the substance, yet making all the difference to the mechanical action of the particular solid mass which possesses it.¹ Consciousness would thereby become a real condition, in the psychological and natural, though not in the theological and supernatural, senses.

The weakness of dualism consists in the fact that it rests a supposed knowledge of the soul as an independent

¹ Consider the endless diversity of formed objects into which the same small lump of steel might conceivably be fashioned. They would vary from the knife-blade, saw, or chisel, for dividing substances, to the rivet, screw, or band, for joining things together.

entity on no firmer ground than our present comparative ignorance of the almost infinitely complex structure and functioning of the nervous system. There is no means of proving that any state, or process-content, of consciousness exists without its appropriate neural concomitants, and to me it seems extremely unlikely that any sort of consciousness should so exist. The fact that the physico-chemical description of a neural process can never explain the subjective mode of consciousness which the process subtends by no means proves that the neural process is not essential to the psychic state. Every instructed person now knows that neural processes, caused by vibrations of light and of air respectively, are necessary to the perceiving of colours and sounds, though the qualities of the colours and sounds, æsthetically considered, cannot be at all explained thereby.

The primitive notion of the soul seems to be definite in proportion to the primitive ignorance of the brain. It arises partly, as Herbert Spencer maintained, from the dream-image of self, which appears to wander in places remote from that occupied by the sleeper's body. But the dream-image is, after all, only an involuntary modification (usually crude and debased) of the mental image of self formed when awake (*cf.* Chapter III, p. 19). There are day-dreams as well as dreams of the night; the former being at least semi-voluntary. The day-dreamer is accustomed to project his own mental image into fancied surroundings, where it enjoys satisfactions denied to himself in the flesh, or plays heroic, romantic, or otherwise distinguished parts which he himself will never play on the world's stage. It is this image of self, formed involuntarily in dreams or voluntarily in waking imaginations, which supplies the primitive idea of the soul.

There is a great psychological advance when we take

into account the sub-conscious part of our personalities, realizing that what we are is not what we fancy ourselves to be, either in disturbed slumber or waking dreams, but what the factors of heredity and environment, together with the use we have made and make of each moment of consciousness as it passes (*cf.* Chapter VI, pp. 36-38), concur in determining. The recognition of the real personality as largely sub-conscious does not necessarily involve any particular theory of the soul, though it naturally invites some such theory. To the Christian supernaturalist it suggests an independent and immortal soul, while the materialist regards this sub-conscious self as an outcome of the hereditary structures and habitual tendencies of the individual brain. For Schopenhauer it means the ultimate, irrational will to live; for Bergson, the creative life-force, which is also, in an especial sense, a time-force. Personally, I am so far a materialist as to think that what is sub-conscious is properly regarded as physical or physiological; but I hold, as against mechanistic determinism, and in partial agreement with Bergson, that actual consciousness involves an element of true spontaneity, which is a making or modifying of personality, and not simply an outcome of previously-made personality. This element is due to the play of mind upon character; to newly-realized ideas of what we would or should be or do coming into conflict with old-established tendencies, weakening their sway, and sometimes winning positive victories over them. There is here no arbitrary freedom, but a certain power on the part of the individual, in the light of the idea which irradiates the passing moment of actual consciousness, to seize upon and make one's own some higher principle of action which may already be, for many others, a moral law, or may simply become a salutary rule for one's own future guidance. Moral freedom is not

freedom to perform overt actions otherwise than in obedience to determining motives. It is freedom to think, to concentrate attention on relevant ideas, and, by so doing, to modify motives and gradually acquire new ones—motives founded on a fuller knowledge of life, a wider human outlook, than the old. Moral progress is thus due to the action of the mobile factor of personality, which is mind, on the stable factor, which is character. Character tendencies are far more deeply planted in the individual than the ideas which reflect upon them, and we cannot alter our characters merely by wishing to be other than we are; still, the wish, when it is sincere, is indicative of the presence of a new moral ideal conflicting with some prior habit, and such an ideal does modify character, at least in the long run, if not in some sudden and revolutionary way as it appears to do in certain cases of "conversion." I hold, then, that mind—not regarded as an independent entity, but as a distinct *mode* of being, associated with the mode of material extension in the whole being of the man—is a real contributory condition of changes which take place in human personalities, and in the human world in which personalities interact and transmit their traits, whether in the way of heredity or of social and educative influence, to future generations. A further justification of this view will now be sought through a brief analysis of some leading facts of natural causation, and especially of the place which animal cognition plays in the transition from action in accordance with mechanical necessity to action in accordance with reasoned knowledge, clear foresight, and free purpose. The action of mind in the world is, in some sense, a revolutionary process. It is probably always dependent upon accompanying nervous energy, but it inhibits or modifies the directions which this energy of organic life would otherwise take.

2. *Some Problems of Cosmological Causation.*¹

The conceptions both of ultimate substance and of natural law are alike assertions of the logically universal in its contrast to the world of singular objects known to common sense. The materialistic monist is confident that there is some one primordial substance whose transmutations* form the various chemical substances (so-called elements and compounds), the various physical and organic substances (which are chemical substances existing under particular conditions of temperature, etc.), and the numberless individual bodies in which "portions" of physical substance, or of many different substances in combination, appear, and which exist, each for a longer or shorter period of time, in some particular place or series of places. It may also be asserted by some that the one primordial substance obeys or manifests one ultimate law of causation. But the concrete substance and the abstract law cannot be identical. What, then, is their true relation? Is the law merely a mental statement of the fact or the mode of causation? But if so, are not the fact and the mode objective? Should not the law state the way in which primordial substance converts itself into the chemical elements and the multitude of particular bodies, with their characteristic ways of acting upon one another?

It is clear that a given chemical substance is nothing apart from the particular instances—solid masses or fluid volumes or particles mixed or combined with those of other substances—as which it exists in particular places at particular times, and that it is these instances which act as efficient causes; the substance itself having no

¹ A much fuller discussion of cosmological problems, entitled "The Meaning of 'the Universe,'" was contributed by the writer to *Mind*, Vol. xxvi, N.S., Nos. 102, 103.

more causal effect than any other logical universal has. No given physico-chemical substance, and still less any given chemical substance, is ever massed into one body in one place; and unless it were so massed *it* could not be a cause of any physical effect. Assuming that ether is a single continuous body filling and, in an empirical sense, *being* space, it is logically singular, not universal, and may possibly be an efficient cause; but, so far as our present limited knowledge of it goes, it appears chiefly as a boundless medium for the locomotion of cosmic masses and the transmission of forms of radiant energy which proceed from particular material aggregates like our sun. *If* ponderable matter is somehow made out of ether, the ether which remains imponderable certainly has not such properties and does not cause such effects as the ether which has condensed into various forms of ponderable matter. Thus, even if we grant substantive identity, modal difference remains the salient fact. But to suppose that the general uniformity of nature proceeds from an absolute unity of kind of one substance—ether or electrical fluid, or whatever it may be—is a tremendous speculation at the present stage of human science, and it is not a speculation which is at all necessary to a strictly naturalistic conception of the universe. For all we positively know, ether and the world of changeful material aggregates (of which “electrons” are now supposed to be the ultimate units) may be naturally distinct, though naturally interactive. If we confine our attention to the ponderable materials alone, it may be reasonably surmised that the majority of the seventy or so recognized chemical elements are not really elementary; but it does not by any means follow that there is no plurality of true elements at the base of the series. A dogmatic belief in the absolute or substantive, as apart from the relational, unity of things

is the last infirmity of many otherwise emancipated minds. Moreover, so far as sober physical science has yet gone, chemical phenomena do not admit of a purely mechanistic (still less of a purely *etherical*) interpretation, and it remains a tenable speculation that *chemism* and *mechanism* are complementary and coeval modes of natural causation; chemism involving a real selective affinity on the part of ultimate bodies which furnishes the rudiments of the progressively finer selective powers displayed by living matter, by the higher sentient animals, and by rational human beings. It must not, however, be supposed that I am biased in favour of a pluralistic interpretation of physical phenomena. Not being a physicist or chemist, I do not presume to advance any theory of my own running counter to physical monism, and, indeed, I have no wish not to see such monism established, but am merely pointing out that it is a mistake to identify naturalism in philosophy with a particular theory of nature which goes far beyond the range of ascertained facts.

It is next necessary to remark that, even if we should grant the unity of kind, and the original uninterrupted homogeneity, of one primordial substance from which all others are derived, there would be no unity of actual causation (as apart from method or law of causation) unless the whole universe, as we know it, proceeded from a single centre of energy—a condensation of primordial ether at some one definite point in space. If, on the contrary, the universe arose (or eternally renews itself) from condensation at many widely separated points, evolution, as proceeding from these different centres of energy, would be due to a plurality of efficient causes, even though ether should be one in kind throughout and the law of its development in each instance uniform. The trend of modern science, which has

shown that neither the earth nor the sun is the true centre of the universe, seems further to make the very idea of a central body and single system of all the systems in space not only problematical, but improbable; while all that is known or legitimately surmised as to the origin of stellar systems in nebulae immensely remote from one another has the same decentralizing significance. If Nature be eternal, and the changeful order in space and passing time eternally complementary to the unchanging order of universals—of substance or substances, modes of energy and laws of causation—it seems reasonable to suppose that the homogeneity of certain vast interspaces of the universe is likewise eternally complementary to the heterogeneous accumulations in other parts, and that the regions of relative chaos and cosmic conflagration always coexist with other regions in which orderly formations occur. In any case, the particular process, or chain of efficient causation, which leads to the evolution of a habitable and eventually inhabited world in one part of space must be practically independent of those chains which may lead, during contemporary ages, to the formation of other such worlds in remote stellar regions.

3. Some Facts of Terrestrial Causation.

In passing from the immense and mysterious cosmos to the comparatively familiar surface of the earth, the plurality of causes and of chains of causation becomes still more obvious. Anything which is mechanically individual, be it only a fragment of rock detached from its parent cliff, is a centre of factual and causal relationship to surrounding things. The fragment is not only acted upon, but acts mechanically through its own mass, consistency, and configuration. That which is organically individual has, however, a much more complex

range of factual relationship—a range vastly extended, in the case of animals, by powers of locomotion; while that which is consciously individual, as human beings are, is a true self, capable of entering into relations still more varied and becoming increasingly purposive.

The objects which coexist on the earth, and are not simply parts of its solid crust or of the ocean or atmosphere, are either *interactive with* or *independent of* one another. Every object is interactive with the earth itself, if only by reason of gravity, and may be interactive with other objects in its immediate neighbourhood; but every object is independent of the vast majority of other objects. It is independent of all those which are not, and often of many which are, in close proximity to it. Proximity is indeed an essential condition of interaction as between any of those minor detached bodies which rest or root or move on the earth's surface. Those which remain remote from one another exist and act each within a different causal nexus. As between those which happen to be brought near together, the attraction of gravitation is in most cases practically nullified by the superior gravity of the earth, so that they do not appreciably act upon one another unless mechanical collision, physical conditions of temperature, etc., chemical affinities, or vital tendencies, compel them to do so. Thus terrestrial, including biological, causation consists largely in innumerable distinct chains of cause and effect, occurring at different points on, or travelling by different paths over, the earth's surface; each causal nexus being at least partially self-contained and independent of others; though the spatial approach of separate chains frequently leads to mutual interference, with commingling of effects and origination of new and possibly more complex chains.

Let us take a first illustration from inanimate nature.

The effect of a fall of rain on uneven ground is that so much of the rain as is not soaked up by the soil forms tiny streams—miniature rivers—which end in puddles—miniature inland seas. Many of these exist, for a longer or shorter period, just as many ponds and lakes exist, in complete isolation from and independence of one another. If, however, we take into account those larger streams which arise from permanent springs, each of these finds its way as a rule into some river, of which it is said to be a tributary. It thus in fact becomes a contributory cause of the several effects of fertilizing and denuding the particular stretch of land through which that particular river runs its course to the sea. But, in the physiography of the earth, each valley and river system is independent of other valleys and river systems; relatively independent even of those which adjoin it in the same geographical area; fully independent of those which exist in other regions.

The movement of a river (perhaps the most life-like of inanimate things) is of course dependent on its conforming to the law of gravitation, as that affects liquids, and tending to find the level of the ocean by winding around, and partly by wearing away, the various solid obstacles which the valley's formation presents. In the case of living organisms, which in form differ from a stream by their compact solidity, natural movements of a much more complex order come into play; namely, assimilation, with growth, both in bulk and definite structure; reproduction; and, in animals and various micro-organisms, powers of self-locomotion.

For each organism there is a particular causal nexus, consisting in the conditions, inherent, or hereditary, and environmental, of its individual life; and for every family of organisms ancestrally connected there is a more extended causal nexus; but, since it is highly improbable

that all life originated from a single parent germ appearing at some spot in the primitive slime or sea, the whole evolution of terrestrial species cannot be regarded as contained in a single causal nexus. If, as seems probable, the earliest forms of terrestrial plant life arose in various more or less widely separated regions of the primeval bog-land, there would be a period during which each local family group (whether or not constituting a distinct species) would have appropriate nourishment at hand, and could multiply, undisturbed by conflict with rival groups. Each would, however, gradually spread from its original habitat to surrounding regions until the available soil was covered, when a struggle for existence would occur at once between the different groups and the different individuals of each group. In the case of the earliest animals, which would of course be dependent on certain vegetable species, it is probable that there would be a similar transition, from the period in which each tribe multiplied in its own area to that in which the tribes met and competed for the available nourishment, while certain of them learned to prey upon certain others, and those others learned in various ways to elude the pursuit of their natural enemies. The transition from independence to interaction would, in the case of animals, be greatly hastened by their locomotive powers; though these powers might sometimes have the contrary effect of terminating interaction, as when, for instance, a given tribe migrated to some new area, leaving its former rivals in possession of the old one.

It is not only between tribes or family groups of organisms, but between the contemporary individuals of one or more groups, that the transition from independent to interactive relations is constantly taking place. Plants growing some distance apart do not

compete for the available nourishment from the soil, but where a seed is deposited and a seedling springs up in close proximity to another plant or plants there arises competition in which the more vigorous individuals tend to starve and crowd out the feeble ones. Similarly, individual animals which remain in separate places have no causal effects on one another, but those which come together at one spot may fight for food or a coveted feeding ground, or one may become the other's prey. The transition from independence to interaction is also strikingly exemplified in sex relationship, where, for instance, the pollen of male plants has to make its devious way (often by means of an insect-carrier) to the seed vessels of female plants, or where sexual relations take place between male and female animals, previously living apart, but which happen to come within the requisite range for finding their mutual affinity.

Whatever the ultimate origin of mankind may have been, it is clear that early civilization originated, to some considerable extent, from the coming together of primitive tribes, which had previously fought their own battles with the hostile forces in nature, and the subsequent subordination of the smaller or less efficient to the larger or more efficient groups, partly through warfare and partly by rough statecraft. Under modern social conditions all nations are more or less interactive, through commerce, interchange of ideas, diplomacy, and occasional war; but no individual is, as an individual, interactive with more than a trifling group of the other individuals comprised in his nation. Apart from the interaction of the child with its parents or custodians and appointed teachers, the relations of individuals (in marriage, friendship, business, recreation, or personal co-operation in religious, political, philanthropic, or cultural activities) are due to accidental conjunction of

the causal nexus which has made the life of one individual what it was, with that which has made the life of the other individual what it was, previous to the conjunction taking place. The slightest incident may initiate an acquaintance which will have the most momentous consequences, for good or for ill, to one or both of the individuals involved; while, in the absence of that incident, they may continue to be perfect strangers; just as, in the physical sphere, the falling of a stray spark on the verge of some explosive or inflammable material may give rise to a devastating and death-dealing explosion or fire; whereas, if the spark fell one hair's breadth further away, it would simply go out - there would be no causal connection between it and the combustible matter.

From the foregoing instances, and endless others which might be cited, it is clear that the relations of independence and interaction are naturally antithetical, and in terrestrial, as probably also in cosmic, happenings, there is always a transition from independence to interaction before natural causation, as accounted for by chemical, biological, or other natural-conditional¹ laws, operates through and upon the bodies which are brought together. In other words, there is such a thing as real contingency or chance, which is not merely the fact that we do not foresee a necessary conjunction of circumstances, but the fact that the necessity itself is extraneous, irrational, not inherent in any law of nature. It is due to the coming together of two things in space when there is no mutual attraction which draws them together, but each is brought to the place where they meet by an

¹ Opposed to natural-categorical laws, of which the law of gravitation is the best known, if not the only established, example; though even it may not apply to such elementary physical things as ether and electrons.

independent chain of causation. Each is, of course, obeying some natural tendency of its own ; but, in so doing, the two things do not exemplify any common law until their proximity is such that their respective natures interact. That *post hoc* is not necessarily *propter hoc* follows from the fact that events succeeding one another in time, and even at what is roughly described as the same place, do not necessarily involve any real action in space of one body or group of connected bodies on another. When a number of bodies are simply collocated, as trees and minor organisms in a wood, or houses and people in a street, each object is strictly independent of *most* of the others, and interaction is an exceptional relation between certain contiguous objects, but not between all objects which happen to be contiguous.

4. *Five Modes of Contingent Causation.*

Setting aside the attraction of gravitation, which acts on all ponderable bodies and particles alike, there are various particular ways in which states or changes occurring in one body can be traced to the presence and action of another neighbouring body. These contingent modes of conditioning or causation may be classified under five principal heads : physical, chemical, vital, cognitive, and social.

There is physical contingent causation by mechanical impact, pressure, strain, friction, etc., by the transference of heat, light, electricity, and possibly of other modes of energy, and by the commingling, without chemical change, of certain substances.

There is chemical causation by the combining of certain bodies or constituents of bodies in a new chemical compound, and by the liberation of elementary or relatively elementary substances previously held in chemical combination.

There is vital causation when one of two interactive bodies is an organism which, while remaining unchanged in its own general character, assimilates the other or part of it; when two interactive cells develop out of one cell; when two independent bodies become vitally incorporated, like the sperm and germ cells in reproduction and any particle which passes from the blood to some tissue; and when the respective organs in a complex organism play their respective and interdependent parts in maintaining the life of the whole. Whether or not a particular combination of physical and chemical interactions is sufficient to account for the origin of life, it is at least certain that the above *modes* of vital causation are different from any modes of physical and chemical causation as these occur between inanimate bodies.

There is cognitive causation when one at least of two bodies in mutual proximity is a living animal which, by means of some sense organ, and either during partial contact or before any actual contact takes place, becomes aware of the other body; and when this awareness is accompanied by a tendency, either instinctive or intelligent, to form closer relations with an object which will serve for food or some other useful purpose, or to avoid contact with an object recognized as dangerous, or possibly to attack an object felt to be inimical. Cognition, combined as it usually is with motive feeling, gives to the animal this unique power of seeking or shunning interaction with particular objects; so that the reign of natural law in a wilderness of chance conjunctions and separations begins to be transformed into the far more significant reign of the same law in a theatre of desires, fears, and conscious oppositions. A higher form of cognitive causation occurs when an animal, actuated by some feeling of need and guided by memory of surroundings or directions, moves to some remote but familiar place in

instinctive anticipation of finding food, shelter, warmth, or fellow animals, though it could not have been aware, through its senses, of any of these desiderata at the time when it set out to find them. The above sorts of cognitive causation approximate to what, in the case of human beings, I have called physical common sense. There are also, of course, the still higher sorts of cognitive causation which proceed from the human will adapting itself to discursive knowledge and pursuing consciously objectified ideals.

Regarded from a biological point of view, cognitive causation is one outcome of vital causation. Now, all vital causation involves the duomodality of structure and function ; and, although the structure of living substance is the *fundamental* fact, apart from which function of any sort is impossible, function is the *significant* fact which tends to explain the development and variation of particular structures. On any theory of evolution the origins of the wonderful wings of the hawk or the gull must be looked for in ancestral structures which could not be properly called wings at all. They became wings through the repeated effort to fly, the increasing success which attended this effort, the natural selection of each of a long series of bird types, each type attaining greater powers of flight, with better wings as a natural concomitant. Similarly, the various sense organs of animals, and the nerve structures subserving memory and anticipation, must have developed through the habits of using certain more rudimentary structures. These habits involved unreflective, but probably not unfeeling, efforts on the part of the animal to know its surroundings and act for its own good on this knowledge. In the case of man, similar efforts have become reflective and discursive, causing, during the life of the individual, repeated modifications in the structure of the brain and the correlative

personality. But just as wings are meaningless apart from the peculiar motion of flying, so the brain structures which subserve consciousness are meaningless apart from the modes of consciousness subjectively or subject-objectively considered.

Last of the five modes of contingent causation, there is social causation when animals of the same species enter into sexual and parental relations, over and above the physiological relations of sex and maternity (which must be classed as vital), or into those further relations of mutual understanding as to respective obligations and prohibitions which constitute the laws of any family or community, sub-human or human. As cognitive causation is a special outcome of vital causation, so social causation is a special outcome of cognitive causation. It implies recognition, in the concrete, of fellow beings towards which the individual has feelings and felt intentions, generally, though not necessarily, friendly; and, in the case of human individuals at least, it also implies recognition, in the abstract, of the rules which the State and social sentiment prescribe.

5. Analysis of Cognitive Causation.

Of the five specified modes of conditional causation—physical, chemical, vital, cognitive, and social—it is the cognitive mode which specially claims our present attention. Vital causation to which cognition has not been superadded agrees with physical and chemical causation, in that there is always actual interaction, or contact, action, and reaction, of certain related bodies; organisms, organs, cells, or fluid constituents. Cognitive causation, on the other hand, has the very significant difference that there is not necessarily any mechanical interaction between the two bodies one of which acts in relation to

the other.¹ When an animal scents or hears or sees something at a distance, it will, according to its instinct, seek to attain or seek to avoid an intimate interaction with that thing. In the former case it may fail to reach the desired object; in the latter case it may succeed in escaping what it dreads. In both cases, therefore, it may happen that no mechanical interaction takes place between the animal and the object; and, assuming that the latter is either inanimate or is an animal unaware of the first, *its* movement, if it move at all, will have a purely accidental relation to the ultimate result, whereas the movement of the animal which is aware and alert will have a purposive relation thereto. One peculiar characteristic of a purpose which clearly distinguishes it from an efficient cause, is that it does not necessarily succeed. The animal's movements which tend to establish interaction for its own good may, as was said above, fail; the fruit which it wants to get at may hang beyond its reach, its prey may escape it, or the animal it would mate with may fail to reciprocate its wooing. Again, those movements which tend, for its own safety, to avoid interaction may fail; it may become the prey of a stronger and swifter animal from which it flees, or may be overtaken by fire or flood, when endeavouring to escape any of these perils. Yet again, if it seeks by combat to vanquish an enemy, it may itself be vanquished. On the other hand, the purpose, whether of acquiring some good or of avoiding some evil or conquering in fight, may achieve its end. Here, then, we have the first instinctive beginning of the conscious norm—that is to say, of an end to which action is

¹ There is usually direct physical interconnection by the media which transmit sound and light; but this interconnection does not effect anything except through the sense organs and conscious response of the animal which hears or sees.

directed, and which is not naturally bound to be accomplished, since the action may either fail or succeed; failure tending to endanger and success to preserve the life of the individual, and, indirectly, that of the species.

The powers of locomotion and varied limb-movement on the part of animals enable them to establish an indefinite number of new relations of proximity to and contact with other objects. The faculties of sensing from a distance, as in scenting, hearing, and seeing, which must have developed *pari passu* with the powers of locomotion, enable them to seek or avoid contact with objects more or less remote into whose neighbourhood they come. Cognition of objects in space is thus essential to the simplest sort of purposive action; but such action also involves an implicit judgment of value, of good to be attained, or evil to be escaped, or possibly of a natural foe to be fought. Whether the fact be due to instinct or intelligence or a blending of the two, it is clear that animals recognize certain objects as desirable, and certain others as dangerous or hostile, and thus adapt their actions at once to the knowledge conveyed by the senses and to that stored in sub-conscious nerve-structures and derived from racial or individual experience.

As previously hinted, the direct stimulation of the senses by objects desired, dreaded, or resented is not always the necessary condition of animal movements. Animals frequently exhibit what, in the case of man, we should call reflective anticipation. The flight of migratory birds, at the appropriate season, to distant lands is a striking example of what might well seem to proceed from deliberate reflection leading to a plan of action. We may indeed grant that this is due to an automatic inherited tendency, assisted by the gregarious instinct; but what about the case of the individual parent bird

which returns unerringly to its nest and its young from a distant point, at which it certainly cannot see the nest or hear the young birds chirp? In this case it seems not unnatural to suppose that the bird has some sort of mental image of the nest and its occupants, associated with an intuitive knowledge of their locality; an image not altogether unlike those images which (as, in the foregoing analysis of common sense, I have striven to show) account for many human actions which are intelligent without proceeding from verbally formulated intentions. In any case, animal cognition affects contingent causation, not only by producing movements towards or away from an object actually sensed, but by producing movements towards objects or places far beyond the range of actual sensation, yet somehow inferred to exist and to lie in a particular direction.

Actions due to instinctive tendencies yield an automatic response to certain stimuli, but these stimuli are never simply external. They are the joint product of facts of environment and facts of organic functioning. They depend largely on the range and efficiency of the animal's perceptual organs, and partly, when the sense of seeing is involved, on the accident of relative position: an animal may or may not happen to see the object which would become visible if it looked in the right direction, and which, if seen, would inevitably excite its activity.

The transition from instinctive to intelligent action occurs when the element of uncertainty or indecision is interposed between the stimulus and the response. There is here a tacit recognition of positive and negative alternatives, and the consequent conflict of motives issues in an action which does not simply obey the instinctive norm of heredity, but may possibly disobey it in favour of some new norm which the individual's

intelligence sets up ; while the transition from doubt to volition, even if it end in obeying an ancestral impulse, makes the action partly dependent on the individual's consent. This element of mental uncertainty and correlative volition is enormously enhanced through the human endeavour to adapt conduct to reflective knowledge of the discursive kind ; but I suspect that it occurs in the higher non-human animals, and constitutes their true claim to intelligence, and even to personality of an incipient sort ; while, in the case of human beings, it occurs as reflective indecision preceding the volitions of practical common sense, and not only those dependent on the logically formulated weighing of alternatives.

The whole gist of this treatise goes to show that discursive reason has its roots in common sense, and the special purport of the present chapter proves that it has still deeper roots in animal cognition at large. Reason arises as cognitive causation. It develops as the psychic concomitant of the nervous system in animals ; of the sense organs which give knowledge of surrounding objects ; of that natural retentiveness of impressions by the brain, or automatic memory, which ultimately gives rise to conscious memory ; and of those motive tendencies which ultimately appear as appetite and antipathy, desire, fear, and anger—the germs of conscious purposes. Although reason is not exhibited in the purely reflex mechanism of the nervous system, it is manifested by instinctive action, just in so far as this is a response to conscious stimulus. The animal really has a *reason*¹ for seeking food or a mate, for avoiding danger, for grappling with an antagonist, though it does not know

¹ This might be expressed in a roughly ratiocinative, though not syllogistic, form ; e.g., "Yonder nut is good to crack and eat ; by moving in the right way I shall be able to crack and eat it : therefore I move in that way."

reflectively what the reason is. I have already briefly glanced at the passage of this instinctive reason into intelligent reason, and noted how the intelligent reason of animals is allied to the common sense of mankind. It now remains to point out that there are certain features common to the whole process of rational activity, and that these features acquire increasing definiteness as reason mounts to higher planes, gradually substituting the reign of purposive interactions for that of chance interactions. I should like, if possible, to show that the specific tendency of collective human reason is to unite good purposes and wise methods in an ordering of individual and collective life wherein the evils proceeding from self-centred passions and the misfortunes due to physical conditions will be gradually eliminated or reduced to a minimum.

6. *The Evolution of Reason.*

From the earliest dawn of cognitive causation in conscious animal movements, reason must have had the two aspects of objectivity and subjectivity; objectivity being the conscious relation to surroundings which are afterwards recognized as being in space, and subjectivity the conscious impulse proceeding from motive tendencies which are afterwards recognized as being in time—handed on from earlier generations or earlier periods of the individual's experience, though reinforced and possibly modified for better or worse in the new moment of experience. The progressive efficiency, or fitness to the world environment, of animal life would depend at once on the enlargement of the animal's objectivity through improved sense organs and organs of locomotion and manipulation, and the enlargement of its subjectivity through the co-ordination of an ever-increasing number of permanent motives to use its organs in appropriate ways under

particular circumstances. The higher animals frequently observe and experiment—that is, seek to acquire truer practical knowledge of the nature and position of objective things, before committing themselves to the more positive actions, such as feeding, fighting, pursuing prey, or seeking safety by flight or hiding. It is here that the natural indecision characteristic of intelligence, as contrasted with instinct, begins to show itself. A higher development of intelligence, synchronizing with the dawn of moral feeling, occurs when the animal forms some sort of mental image of its mate, its mother, its young, or maybe of its rival or personal enemy. Among the less intelligent animals, any male mates with any female of the same species, according to the accident which brings them together. Among the higher animals, mating involves personal wooing and winning and continuing family relationship, in which the partners evidently recognize one another, and recognize their own offspring, at least during the period when these stand in need of parental care. There is here an obvious increment of purposive relation—a moral victory, however partial, over the blind principle of chance conjunction. In the primitive unity of the savage tribe there is a further advance in the same direction. The purposes of the individual and of particular families are recognized, but are subordinated to the purposes of the group, which have, however, in general, and although there may be a primitive sort of “referendum” on occasion, to be expressed through the will of the chief or the voice of the associated elders who rule the body politic. It would be quite beyond the scope of the present essay to attempt to trace the evolution of that increasingly purposive causation which appears in human society, and I can only briefly allude to the supremely important part which has been played by language, with its inevi-

table early accompaniments of speculative superstition and dogmatic conventionality, in the great drama of human progress.

To draw an exact line between common sense and the reason which employs language is as difficult as to draw an exact line between instinct and intelligence ; but it is safe to assert that, as there is much instinct which is not intelligent, so there is much common sense which, though intelligent, is not logically formulated. The earliest steps towards civilization were doubtless taken by "rule of thumb," which is only another name for what I have previously called physical common sense. The manifold adaptability of the human hand, as guided by the human eye, and developed, first by habits of grasping, lifting, throwing, bending, breaking, kneading, and moulding natural objects, then by such operations as shape or combine natural objects into weapons and tools, and then by the exercise of skill in the using of those implements, would not be much affected by having or not having appropriate names for the materials and implements used and the ways of using them. But when primitive men came to recognize personal property in certain things, and the consequent right to barter them as commodities ; when primitive chieftains gave directions as to the employment of their subjects in peace or war ; and when diversity of occupation and the co-operation of different crafts in social life became common, language would obviously be of great use, and to some extent a *sine qua non*, in promoting these properly social relations.

Language provides certain definite symbols for the object-matters of perception and mental imagery—symbols which can be used at will to direct attention to, the object-matter when present or to evoke the mental image of it when absent. Herein appears a remarkable

enlargement of the objectivity of reason. Facts which would otherwise pass unheeded are brought to light; things which would otherwise be unremembered are brought to mind; while the resulting perception or resulting memory often leads to practical interactions which would not otherwise take place. At first, however, it is only a few objects and actions which have very obvious importance in the life of primitive man to which substantive or other designations are applied with any degree of consistency. The senses are always informing us vaguely of far more facts than language records. A single momentary glance of the eye transfers to sense-consciousness a multitude of details pertaining to surrounding things in their relation to ourselves—details for which the savage has no names, and which it would tax the richest civilized vocabulary to describe. It is only those things which frequently re-appear in the field of vision, giving rise to mental images and ideas of concrete kind, and only those among such things which are felt to possess a useful or injurious relation to the primitive tribesmen, which at first acquire well-understood substantive names; while the movements and relations of things, described by verbal predicates and other parts of speech, are correspondingly few and simple, being such only as the arts, customs, and vicissitudes of primitive life have brought into prominent notice.

But primitive man has sufficient speculation, and sufficient power of observing surrounding things which are neither good nor evil from a purely practical standpoint, to realize vaguely that the narrow sphere of his actual knowledge is connected with and dependent upon a much wider sphere of natural objects, conditions, and forces, of which he knows next to nothing, though he is naturally prone to attribute life and mysterious quasi-purposive influence to any parts of it which move or

change without obvious cause. A few terms in primitive language come to refer especially to this circumambient sphere of unknown reality and mysterious causation. These are the terms of folk-lore or early mythology, which naturally lend themselves to the crafty purposes of those more or less self-deluded men who pretend to occult powers; the magicians who claim to control nature by knowledge and force of their own which others do not possess, and the priests who arrogate a like superiority in the art of propitiating super-human spirits, or gods. Thus the great increase in mental outlook due to language, which in effect detaches mental images from their roots in actual perception and gives them a new point of development in treasured names, is not wholly a gain to reason. Around these treasured names there cluster, not only actual memories, but fantastic speculations, and there is thus created a peculiar delusive objectivity, a sphere of unreality mistaken for reality, a sham world, the subjective idea of which is only too real and potent a factor in human life; since by its means the thing which is not may bring to nought (and bring to pass) the thing which is—may, for instance, cause sacrificial rights or religious persecution, and thus destroy human or other lives, while obstructing rational activity in countless ways. Here, then, begins the antithesis and antagonism between truth and error, science and superstition, knowledge and pseudo-knowledge, which is groundless belief masquerading as sacred or infallible truth. While, however, this antithesis is actual, and this antagonism a necessary concomitant of human progress, it must not be forgotten that human culture consists largely of ideas and speculative imaginings which are not formulated as definite beliefs, and which are therefore neither to be condemned as false nor commended as true.

Language is the great instrument by which knowledge, pseudo-knowledge, and the vague intermediate culture are handed on from generation to generation. In all ages since language arose there must be some discursive beliefs, relating to facts which come within range of the average human experience of the day, which are strictly true; being either pieces of positive science or germs of what will ultimately be recognized as such. The culture which falls short of this genuine knowledge is subject to three distinct modifications. First, the mythology natural to the primitive mind, with its paucity of defined terms to symbolize surrounding realities, gives rise, through spiritistic and sacerdotal pretensions, to dogmatic systems of supernaturalism and theology. Secondly, the poetic impulse frees the mind from the childish necessity of believing all that it likes to imagine, and creates that literary art which is valued partly for its essential beauty—its power of interesting and pleasing—and partly for its verisimilitude—its tendency to represent what is naturally possible, without pretending to be literally true to historical fact. Thirdly, the critical, or philosophical, historical, and speculative-scientific faculty seeks to bring the spheres of religious belief and poetic fancy into harmony with the growing sphere of positive knowledge; though, in so doing, it creates many types of opinion which are essentially one-sided—provisional guesses at truth which have a value relative to the age in which they are made and the stage which collective human experience has then reached.

Superstitious credulity, dogmatic assurance, verbal mysticism, and perverse pedantry are failures of reason largely due to mistaken confidences in the values of words; but there is no remedy for these errors except language itself, as put to better use. On language depends our whole power of questioning, comparing, and

co-ordinating judgments, which leads to the practice of investigating the evidence for particular beliefs and rejecting those which, on being weighed, are found wanting. In the case of physical science, successful investigation is, of course, dependent on observation, experiment, and calculation, as applied to certain data of common sense; but always as requiring to be recorded through logical statements. These scientific methods at once enlarge the sphere of true objectivity, and tend to free the subjective life from the incubus of false objectivity, due to mythical and mystical beliefs; but philosophy, rather than physical science, is needed for the positive culture of subjectivity, or of personality under its related aspects of character and mind. When thought interrogates consciousness for the ultimate meanings of things, and seeks to correlate consciousness, psychologically viewed, with the world of external reality, the formulation of truth is of course dependent on studied attention to the facts of consciousness as they occur to the individual thinker. We cannot point out such facts to the visual observation of others, as we can do in the case of many physical objects and occurrences. Thus the necessity of language as an instrument of thought comes still more to the front; it is solely by applying terms consistently to particular contents of consciousness that we can fix attention on those contents. (*Cf.* Chapter IX, pp. 65-66). Until this fixing of attention and concurrent determination of psychological meanings is achieved, philosophy is merely dialectic, with a tendency to become some fanciful system of intellectualism or mysticism; but, in so far as philosophy involves an accurate analysis of the principal sorts of experience constituting human life, it becomes the first of the sciences in a logical sense—the science which explains the origins and relations of all others. And not only

does philosophy tend to co-ordinate the sciences in a unity of speculative knowledge. It also tends to co-ordinate human activities of all sorts in a unity of practical reason, or of right living for the individual and right regulation for the community. Science, as commonly understood, is concerned with the physical world and man's relations thereto, including his social relations on their more material and economic sides. Philosophy takes only a very broad survey of the field which science covers in detail; but, on its part, makes or should make a detailed study of human knowledge in its subjective origin, of the motives of human nature as these interact with the growth of knowledge in the personality of the individual, and of the institutions of society as these interact with the growth of knowledge in the community.

As the practical tendency of science is to give humanity an ever-increasing control over physical, chemical, and biological causation, so the practical outcome of philosophy should be to give us an ever-increasing control over that part of cognitive causation which consists in our own conscious motives, tending to augment the better and eliminate the worse elements, and also over social causation as exemplified in the human community, tending to improve its institutions and to frustrate the anti-social forces which are ever at work in its complex structure. Both as science and as philosophy, discursive reason marks an enormous advance on simple common sense, and adds a hundredfold to man's power of controlling natural and human-natural causation of the contingent orders. But neither science nor philosophy can dispense with common sense as such; both are ultimately dependent on the order of mental images from which conceptual ideas take their rise.

7. Three Tendencies and Types of Character.

From the earliest dawn of cognitive causation in animal movements responding to sense-perceptions of surroundings, not only must there have been objective and subjective aspects of life, but the responsive or subjective factor (whether instinctive or intelligent) must have had a twofold form. It appeared either as appetite or antipathy. Appetite took the two forms of seeking food and seeking sex-relation, which agree in being tendencies towards a desired object. Antipathy took the two forms of fear and anger, which pursue the contrary courses of avoidance and opposition; fear causing the animal to seek safety by flight, concealment, or the protection of its fellows; anger causing it to "go for" and strive to overcome its enemy. It thus happens that there are three fundamental modes of purposive relation in animal life—(1) the seeking of an object which is liked or felt to be good; (2) the avoiding of an object which is feared or felt to be dangerous; and (3) the opposing of an object which is hated or felt to be hostile and needing to be overcome. When speculation mounts the ladder of life to the rung occupied by civilized man, it will be found that these three primitive sorts of purpose are manifested by even the noblest characters and in the promotion of the highest ideals. Common sense assures us that some things are good and worth striving for; that some things are simply dangerous and need to be shunned; that some dangerous or antagonistic things have to be encountered and, where possible, overcome. Practical philosophy endeavours to determine what things really ought to be pursued, shunned, and opposed respectively, or when and how they ought to be pursued, shunned, and opposed.

Every person is actuated at times by each of these

three fundamental motives ; yet certain persons are much more apt to be actuated by one than by the others, and the *moods* resulting are often out of all proportion to the real occasions or objective stimuli to which they react. The habitual attitude of seeking for things felt to be desirable without being dangerous is not (as, if I remember rightly, Locke somewhere suggests) to be generally regarded as due to the spur of pain in the absence of the desired object. The *toward* endeavour, sustained by the present image of the hoped-for object, is normally pleasurable, and only becomes painful when satisfaction is too long delayed or is finally frustrated. Accordingly, it is the preponderance of this motive which gives rise to the *optimistic* temperament. On the other hand, the motive which is always apprehending and, at the same time, seeking to shun some real or supposed danger or misfortune results in *pessimism* ; while the motive of opposition, which strives against what it resents, gives rise to the *combative*, which may become the *reformative*, temperament.

The average healthy human being is an optimist. He is only occasionally gloomy and fearful, only occasionally angry and quarrelsome. Generally speaking, he finds life worth living, and the steady pursuit of positive ends, whether dictated by the sense of economic necessity or by that of social duty or simply by personal inclination, prevents him from dwelling over much either on facts which are sorrowful or menacing or on those which he resents as personal or social wrongs.

Those who are highly sensitive and fairly reflective, but deficient in health or vital energy, tend to take a very different view of life. For them "the heartache and the thousand natural shocks that flesh is heir to," "the whips and scorns of time, the oppressor's wrong," etc., etc., quite overshadow the pleasing features of life.

Memory is regret, anticipation is apprehension, action is weariness, striving is in vain; thus they grope in the twilight or lapse into the darkness of melancholia, or perhaps find a partial refuge in religious faith or in philosophic fatalism.

The combative temperament differs from the optimistic and agrees with the pessimistic in being generally and profoundly dissatisfied with things and persons as they are; but, unlike pessimism, it always has its remedy at hand. This consists in destroying or subjugating or reforming what it dislikes—or dying in the attempt. Of course, the typical duellist and the typical soldier, as well as the simply *dis-agreeable* person, have this combative temperament. Its sedulous cultivation in the past by ambitious and avaricious aristocracies to which civil utilities seemed degrading was one of the chief causes of that remarkable institution known as war. Sometimes, no doubt, the “enemy” happened to be of an inferior race or to represent a really bad “cause”; but, generally speaking, the antagonists were morally well-matched, and only perverse in wanting to have their own ways and sublimely ignoring the interests of any neutral parties.

However, the combative temperament has found a true utility when its chosen antagonists have been not men—not rivals or foreigners or opposed partisans—but unjust laws or irrational beliefs and customs, including the institution of war itself, or natural evils which knowledge and skill may avert or mitigate. In all these cases the temperament is not merely combative, but reformative.

Now, it is well to observe that temperament is one thing and rational conviction another. The writer must confess to being constitutionally—at least, since he lost some youthful illusions—very prone to pessimism; but,

by conviction, which he is fain to deem rational, he believes that an attitude of subdued optimism, combined with combative earnestness in *fighting the evil and freeing the good by the weapons of knowledge and reason*, is the proper attitude for a sane human being, in a world of physical and social and inner-experiential realities, to adopt. Pessimism, as such, should be discouraged; but not by pretending that evil is good or that it is easy to overcome. It is not good, and it is not easy to overcome. There are some forms of it against which it is futile to strive and which must be philosophically faced. There are some which it may be wise to escape by retreat, when it would not be possible to hinder them by opposition. But there are some which should be fought; and some of these can be conquered.

It must not be forgotten that one may be needlessly combative in the advocacy of needful reforms, and even mistaken as to proposed reforms being needful. There are some supposed moral blemishes and some supposed mental mistakes which it is better simply to avoid for ourselves than to rebuke vociferously when they occur in others. Nevertheless the reformative temperament is the greatest factor of progress. It is the factor which differentiates occidental activity from oriental passivity. And true reformers have to be combative when they work in a world of easy-going optimists who do not see the need for reforms, backed by a strong minority of sour pessimists who do not believe in their possibility.

Now, there are two very different types of reform: the destructive-constructive and the purely constructive. In the first case there is an appeal to the laws or ideals of morality or truth. The existing injustice or wrong custom or prevalent false belief must be openly combated in order to be supplanted by right action or true

thinking. In the second case it is only a question of substituting more efficient for less efficient methods; the old methods are not necessarily condemned, any more than steam power or coal gas are condemned when electricity begins to take their place, or a local authority, when some of its powers are transferred to a higher co-ordinating authority, or an established system of medical treatment, when a new system begins to be practised. When, however, a new method has, in fact, been introduced into man's world, it will inevitably compete with other methods, and may in time supplant some of them. Purely constructive reform does not, of course, call for the same sort of combative zeal which is called for by the destructive-constructive motive; but it always has to fight against the inertia of that conservatism which refuses to believe that any new thing can be better than the accustomed thing.

Much importance attaches to the question as to where we should draw the line between reforms involving the great moral and intellectual issues of right and wrong, truth and falsehood, and those which merely involve the prospect of progressive betterment. Combative enthusiasts are much too prone to see sharp antitheses of good and evil where common sense and a realistic philosophy see only questions of relative value. Fiery zeal and cool reasonability seldom run in the same harness. That wholly militant type of mind which is in constant revolt against what it conceives to be sin, or injustice, or superstition, is essentially one-sided, and usually wrong in its estimate of the evil to be removed and the proper way of removing it. Pure iconoclasm, in fact, misses the real complexity of modern social conditions; the fact that there are numberless sane activities, personal, political, and cultural, which are good in themselves and undergoing progressive modifica-

tions for the better; the fact that humanity expects of every man and woman some help in the world's positive work, and not merely much raging against social or religious blunders, no matter how much reason there may be to rage. To admit all this is not to disparage iconoclasm as such, when it keeps within reasonable bounds. There are always plenty of sleeping souls who need to be rudely awakened; always plenty of cherished idols which need to be dislodged from their ancient pedestals.

8. *The Good and Bad in Pre-human Nature.*

The three tendencies and types of character above considered are concerned with object-matters regarded as being good and bad respectively. Now, there is a natural tendency to call anything which we personally like "good," and anything which we personally dislike "bad," but the truth is not so simple (or so perplexing, when the plurality of *us* is taken into account) as all that. Goodness and badness are not altogether questions of personal preference. There is a large measure of agreement among intelligent and well-wishing people as to what is really good and what really bad in human conduct; and, although this is the crucial sense of goodness and badness, there are other legitimate senses, and some which do not depend upon human sentiment at all.

When we exclude from what we are pleased to call "nature" the whole world of human conventions and creations—the whole product of man's reason, sentiment, and art—we cannot call the remaining primordial nature either good or bad in an absolute sense. Still, if we grant that human life is on the whole worth living, and that man was not miraculously created but naturally evolved, we must also grant that primordial nature is good to man in the sense of having produced, from its

matrix of terrestrial materials and conditions, the human race in embryo. Through natural development and selection "nature" has brought forth man, fitted with his familiar organs of locomotion, action, and utterance, and those sense organs and rudiments of reason which enable him to act for his personal or family or tribal good in a more or less hostile environment. The progress from savagery to civilization is due, not to 'primordial nature, but to the collective action of mankind itself, inspired by the more humane, inventive, and far-seeing leaders and teachers whom, from time to time, the race produces among its different peoples.

There are, however, two senses in which good and bad can be spoken of in connection with the things and facts of primordial nature, irrespective of mankind. These are (1) the good and bad in relation to particular organisms or species, and (2) relative perfection and imperfection of type, as exhibited by different individuals of a species.

(1) Terrestrial environments and climatic conditions are good or bad in relation to the life of particular organisms which live in or encounter them. Organisms which help others to live are good in relation to those others, and organisms which destroy others are bad in relation to those they destroy. Beasts, birds, reptiles, and fishes of carnivorous habit are bad in relation to their victims. The parasitic organisms which produce diseases are bad in relation to the more highly-developed forms of life; and, in this case, the victims are so obviously superior in structure and function to their insidious foes that we are almost tempted to term the latter *utterly* bad. On the other hand, those plants which are capable of nourishing the majority of well-developed animal species are certainly good in relation to the great multitude of animals in question, which of course include our human selves. It may here be

remarked that, when animals feed on the foliage or the fruits of plants, they do not as a rule destroy the individual plants; while man, who feeds on some roots as well, is careful to propagate the species in question. Also, in regard to the moral wrongness which some vegetarians see in flesh-eating, it must not be forgotten that, when man feeds on the flesh of the animals he breeds and farms, his care gives them a comparatively long and healthy life, which they would not otherwise live, before he sees fit to cut it short.

(2) Each individual plant and animal approximates more or less truly to the ideal type of its species; the range of approximation, or of comparative sufficiency and deficiency, being greater according as the species itself is a more complex and highly-developed one. The individual tree or quadruped has the general characters of an oak, a racehorse, or some other species or specific variety; but these are modified in directions which make it a really excellent, a merely average, or a decidedly bad representative of its class. The finest type has perfections which do not belong to the average specimen, and is also free from diseases and blemishes which do belong to the degenerate specimen.

It is not necessary here to take into account those variations of type on which differentiation of species is founded. These are certainly not mere blemishes, but any special goodness they may have must be in relation to the prospective type, not to the type from which they vary. Ignoring such variations, there is still the question as to the relative parts played by heredity and environment in promoting trueness to type. All I will venture to say is that heredity (strictly speaking, the individual itself as affected by heredity) does generally tend to reproduce the type in its true totality of characters, but that this right tendency is frequently thwarted by

accidental circumstances of environment, especially by the action of organisms of inimical type.

Man has many ways of regulating the world of sub-human animals and plants to suit his own convenience or taste; but, if we ignore human agency, there are indications that the strife and waste involved in natural selection constitute only one aspect of sub-human nature. Despite predatory and parasitic organisms, there are, throughout living nature, endless differential adaptations to inorganic environment, and endless co-operative adaptations to reciprocal needs of life, which suggest that the aggregate tendency of evolution is towards a common-wealth of higher types which help one another to live and survive, of course within the limitations imposed by the nutriment available for plants and other inorganic conditions.

9. The Sphere of Humanistic Purpose.

By humanistic purpose I do not merely mean the purpose of those who may be termed humanists, in the modern sense of the word. Such humanists are rationalists¹ who have a constructive outlook, and include Positivists, Secularists, Ethicists, and many who call themselves agnostics or even glory in the title of atheists. Thinkers of all these schools agree that man's concern is with the natural (both physical and mental) universe, and not with a supposed supernature; not with a world of disembodied spirits, or a transcendent Deity, or a

¹ "Rationalism," like "humanism," is used in the modern sense, in which the rationalist is mainly distinguished by an attitude of anti-supernaturalism. Generally speaking, he is not a rationalist in either of the older philosophical senses, but belongs to one of those schools which, while claiming to use reason as freely and sincerely as possible, nevertheless subordinate thought to experience as the ultimate source of knowledge, and experience itself to physical reality as the ultimate sphere of causation.

fatherly Providence extraneous to the human community. All human purpose, however, is humanistic, in so far as it proceeds from sympathy, compassion, gratitude to fellow human beings, love of justice and just indignation at wrong or repugnance to vice, or from a sense of fitness, wonder, beauty, or other natural worth. Most of these motives of course appeal to religious believers of all creeds, as well as to humanists; but the humanist maintains that their real source is in human nature, striving to be true to its higher natural type, and not in beliefs about God, immortality, or a spiritual world.

We have seen that biology entitles us to speak of good and bad; firstly, in so far as particular organisms are favourably or adversely affected by other organisms or inorganic conditions; secondly, in so far as individuals are good or bad specimens of a type. Distinctions similar to the above reappear with intensified meanings in human history, and here they apply, not only to the interactions of individuals and to persons as relatively typical, but to the interactions of communities and to community types.

The ideal man or woman must be conceived as an amplification—in physical respects of health, strength, beauty, and grace, in moral and emotional respects of character, and in cognitive and creative respects of mind—of the average human person; while, of course, being free from the crimes, vices, and other positive blemishes which mark human degeneracy. In actual life it is too much to expect all these perfections together, and it is held, by Positivists and others, that the substantially good character—the person who is really good in relation to fellow persons and the community—need not be, on the physical side, particularly healthy or strong, skilful or beautiful, nor, on the intellectual side, particularly wise or erudite or talented. So far as the intellectual developments which culminate in special knowledge,

skill, or genius are concerned, it is hardly conceivable that these could all be harboured by the same brain. Accordingly the typical astronomer, biologist, historian, philosopher, statesman, lawyer, doctor, poet, novelist, painter, musician, etc., may best be regarded as so many different ideal types—types which have in fact been realized, to as high a degree as most of us can imagine possible, in certain historically celebrated individuals. At the same time, these leading minds have realized their respective types through excellences which were unique and personal rather than simply typical. Clearly the cultural ideal of an all-round education will never enable any one person to *be* an instance of all these types at once; but it should enable him to appreciate, and in some sense revere, them all, while maintaining that the humblest of those who persevere in their duty to the community are also worthy of reverence. This right attitude towards all human excellences is an important part of the teachings of Auguste Comte.

It is a moral virtue to persevere in any course of intellectual development and in any industrial or professional vocation for which we are really fitted. It is largely by self-development that we benefit others and enter serviceably into the life of the community. At the same time the permanent essence of the moral ideal is not self-development, but altruism, in the sense of right relationship to others. It is recognition at once of the limitations imposed on self by the rights of others, the obligations imposed by the needs of others, and the gratitude due to the goodness of others. It involves the self-controlled and long-suffering temper, compassionate of human weakness, which forbears when provoked and forgives when injured, yet does not lightly tolerate injuries done to fellow men.

There is a broad agreement among civilized human

beings as to (1) the sort of actions which are morally evil, if not legally criminal; (2) the sort of actions which are obvious duties and to omit which is wrong, if not punishable; and (3) the sort of actions which are worthy of praise, as heroic or saintly, or (better than either) typical of the really good man or woman. The average morality of the well-intentioned person, who generally avoids actions of the first sort and generally performs actions of the second sort, is recognized; while it is seen that there is a down-grade ending in villainy or depravity, and an up-grade ending in the character to which all should aspire though few may attain it.

So far, then, as individual life is concerned, the whole moral ideal has the two aspects due to human inter-relationship and self-development. It includes, firstly, purposive altruism,¹ or the striving for right relations with others, under a sense of our common humanity and the moral law which flows from it; and, secondly, purposive egoism, or the striving to make the best of ourselves, and pursue with earnestness the intellectual, æsthetic, or practical interests of life for which we feel ourselves fitted.

¹ The negative and positive aspects of altruism ought to be carefully distinguished; the negative, or limiting, aspect being the more fundamental. The two forms of "the golden rule" are not really equivalent to one another. Some persons, of a sensitive and imaginative, but slow and cautious, temperament, are extremely scrupulous in not doing to others what they themselves would resent, but fail in extending sympathy and assistance to those who need them. Some other persons, of an active rather than a thoughtful temperament, are always ready to give the helping hand and accept duties on behalf of others, but are by no means always careful to restrain actions which will hurt the feelings or even infringe the rights of people they dislike or sometimes of people they befriend. I hold that, as in theory of knowledge the perception of distinction is the necessary basis of the perception of relations of all sorts, so in ethics the "thou shalt not" is the proper groundwork on which the much more complicated structure of "thou shalt" should be raised.

Under present conditions the latter motive is, for most people, inseparable from the need of making a livelihood and the hope of attaining to some degree of economic independence; but, in so far as the motive of money-making supplants that of using our own powers and ideas to the best advantage, there is an evident lapse from the genuine egoistic ideal. This ideal conflicts with the altruistic chiefly in so far as the concentration of attention on our own special interests (which may, of course, be civic or philanthropic, as well as intellectual, artistic, commercial, etc.) diverts attention from the claims of *particular* persons—our family, friends, and others, to whom we might be helpful. But sometimes it is the others who are to blame. The self-developing motive may be accompanied by an innovating genius, and then it is likely to be mistrusted, if not resented, by a social environment of tame mediocrity and biased conservatism. The prophet's own country, the reformer's own generation, will have none of him. If he be a true teacher or genuine reformer, his contemporary influence *may* be almost *nil*, and the good he is allowed to do will then accrue chiefly to posterity. For these and other reasons the egoistic and altruistic sides of morality often seem hard to reconcile; but they should not seriously conflict, and if human society is really progressing, they will, I believe, more and more appear as essentially complementary.

Perhaps the greatest discovery of the present age is that, if civilization is to survive, humanistic purposes must regulate the relations of nations themselves and of groups within each nation. There are right and wrong relations between States in the world-commonwealth and between subordinate groups in each State; also between subordinate groups and the States to which they belong. Nations and parties may, like criminal indi-

viduals, commit wilful aggressions ; but more frequently the patriotic and partisan motives lead men astray through the assumption that their own country or their own party—both far greater entities than their individual selves—cannot seriously err. But the aggressions of the self-righteous group are far more dangerous than the aggressions of the self-righteous individual. To spurn the limitations of international comity because our own country's interests are at stake and our own country must be right is the perennial motive of international wars ; while to attack our own country's Government because it does not yield to our own party's will, which is of course bent on establishing some just reform, is the parallel motive of most civil wars. The self-centred and self-righteous, whether as individuals, political parties, religious bodies, industrial unions, or nations and empires themselves, cannot do wrong in their own eyes ; but they do wrong all the same. They need an enlightening education.

The ideal world-community of men and women, freely developing through their local, their national, their guild (industrial or professional), and their international organizations is yet a long way from *existing*. Nevertheless it may, I think, be said to *subsist*, or to be in actual process of formation, through the growing aspirations of a great multitude, handed on from past to present and from shore to shore. Born of simple goodwill, these aspirations are being shaped by collective experience and reason towards a well-proportioned system which is not only worth attaining, but ultimately attainable. In the family of men and nations, truth, justice, kindness, beauty, and practical reciprocity in its manifold forms, will tend to prevail as increasing knowledge lights the way to better institutions and growing wisdom yields them a more loyal support.

Such is the hoped-for culmination of that process characterizing animal life which I have previously termed cognitive causation—a process acting finally through its higher human forms of common sense, the practical and æsthetic arts, the sciences, and philosophy.

10. *Man and Nature.*

But what of the infinite primordial reality, comprising the ceaseless time-process to which all minor processes belong, and the numberless multitude of integrating, disintegrating, or relatively enduring bodies which occupy boundless space—the reality which, in its all-embracing aspect, we call the universe; while, in its ever-reproducing and ever-newly-evolving aspects, we call it Nature? Would a perfected Humanity be so wrapped up in itself and in the immediate riches of mother-earth, as exploited by science and beautified by art, as to care nothing for the source of its being—the ever-sustaining, ordered energy—the great encompassing co-reality in which the ocean-girdled globe itself seems to shrink and become an atom? We are here in the presence of an object-matter too vast and sublime to admit of dogmatic affirmations or negations. We must recognize, firstly, that our knowledge of the celestial universe is a very attenuated knowledge of a part only of that universe; secondly, that the highly significant facts of life are known only as they occur terrestrially, and the still more significant facts of developed consciousness only as they occur in mankind; thirdly, that knowledge, as such, is limited by our human modes of sense-perception and our human powers of rational inference.

To me it seems that our true relation to Nature is not one of awed subservience, as to a mysterious Providence which great faith alone can descry, still less one of angry protest, as against a malignant goddess, "red in tooth

and claw," terrible with cataclysms, and sinister with the germs of disease, but one of *philosophic acquiescence combined with sustained interest in and growing knowledge of that ordered reality which is ultra-human.*

The fundamental parts which the various sciences play in building up this knowledge by patiently investigating the relations of object-matters within their specially selected spheres is, of course, admitted by all thinking people. It remains for philosophy (as methodology) to co-ordinate, so far as possible, the many outlooks of the sciences with a unified outlook on knowable Nature, and, finally (as epistemology), to co-ordinate this unified outlook itself with those facts of human experience and reason which alone can warrant it.

A CRUCIAL STAGE IN THE GROWTH OF PHILOSOPHY.¹

IN the growth of man, as in that of any one of the higher animals, there are two well-marked stages: first, the transformative development of the embryo from the impregnated germ cell; second, the expansive development, from the fully-formed embryo, of infant, child, adult. Physiologists tell us that during the earlier stage the fertilized germ cell becomes a group of cells, and, from this vague and relatively structureless nucleus, the various organs are evolved, some appearing earlier and some later, until at length the embryo becomes a practically perfect organism. Now, it is important to observe that the germ cell, though the ultimate origin, is in no sense an epitome of the human being; while, on the other hand, the babe (and the embryo at a particular pre-natal stage) is an almost exact epitome of the adult. Notwithstanding certain developments which have still to take place, there is a man or woman in miniature; practically every organ is present and occupies its proper place in relation to the other organs which go to make up the human anatomy.

I shall assume that the growth of philosophy, or of human knowledge as a consciously and logically connected whole, is analogous to the growth of a human being. The history of speculative philosophy, commencing with the crudest surmises and alternating with critical movements scarcely less crude, develops through a series of startling transformations. Now one aspect of truth assumes exaggerated importance, and now another; while many mythological elements appear, like those

¹ An extract, slightly revised, from the author's *Anatomy of Knowledge*.

vestiges of lower forms of life which the human embryo displays. In short, embryonic philosophy presents such various shapes at different stages that sceptics are encouraged to make light of its vital unity and to regard it as a mere bundle of contradictions which can never come to a satisfactory birth. But all the while the tissues and organs of philosophy are undergoing harmonious development. The really valuable notions of outgrown systems are ready to be brought into line with one another. What appeared to be contradictions are ripe to be revealed as complementary aspects of truth. It is becoming possible to trace an organic connection in the parts of knowledge which will not need to undergo further transformation. Organized knowledge may be but as a babe, yet its anatomy tends rapidly to perfect itself. This babe is perhaps destined to grow to dimensions which we cannot conceive; but none the less is it bound to grow along lines which are already familiar to us, and from which it cannot depart except by dissolution—by ceasing to be organized knowledge. To realize and systematize these abiding features of knowledge has always been the great constructive aim of philosophy.

EPILOGUE:
THE TREE OF KNOWLEDGE

P OETRY'S fair creations, scattered, blow,
H ere, there, as vivid-hued far-fragrant flowers
I n Art's charmed meadow. KNOWLEDGE springs not so ;
L ike some strong, peerless tree, it spreads and towers ;
O f which, the Sciences are boughs immense ;
S tatements, the serried sprays, and Words, the leaves ;
O ur Reason, tap-root, and the rootlets, Sense ;
P hilosophy, which links and interweaves
H igh truth with homely fact, the stately bole,
Y ielding united being to the whole.

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